

ENVIRONMENTAL SYNOPSIS

The Chairman's Corner

Rep. Scott E. Hutchinson, Chairman



It was back in November of 2002 that I penned a Chairman's Corner column on vehicle gasoline mileage and the driving habits of Pennsylvanians. I suggested then that we should once again consider ways to

"...conserve fuel, improve air quality and ease traffic congestion."

The issue was brought to mind again by some recent stats from the 2000 Census and a couple of thought-provoking articles from the Brookings Institution. The census figures rated commuting times for various cities and states across the nation for 2002. For the record, New York City residents had the longest commute (38 minutes), while Philadelphia was third with 30.3 minutes. New York - the state - also had the longest commute time (30.8 minutes), but Pennsylvania dropped to 15th (23.9 minutes) and was the first state to be ranked below the national average (24.4 minutes). Also, while Philadelphia tied for fourth highest in use of public transportation (27 percent of its workers), Pennsylvania tied the national average - only five percent - in the percentage of workers who used public transportation to get to and from work.

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2003 Annual Report Now Available

The Joint Committee is proud to announce the release of its *2003 Annual Report*. The 14-page report details key activities, achievements and publications of the committee over the past year. Anyone who would like a copy of the annual report may contact the committee office at (717) 787-7570. The report is also available electronically on the committee's website - <http://jcc.legis.state.pa.us>.



NOTES FROM THE DIRECTOR



CRAIG D. BROOKS, DIRECTOR

Move over and make way for LOHASes, mainstream consumers who make purchases with a “lifestyle of health and sustainability” in mind. You probably know them. They put their money toward making purchases that are environmentally friendly and socially responsible. Whether it’s low odor paint or unbleached sheets, these consumers purchase eco-friendly items with the idea of saving the earth one purchase at a time.

I had the opportunity recently to speak with Alice Rolls, Executive Director of Georgia Organics, an organization that promotes organic and sustainable farming practices. She said that the “growing consciousness of the consumer and the potential environmental considerations increasingly determine what we purchase. It’s not about the price tag, it’s about the impact of our purchases”.

Are you a LOHAS? Would you like to be? It’s catching on.

Buying green doesn’t mean sacrificing quality and comfort. So if you’re considering a new family home built the Earth Craft way, an environmentally friendly building standard, it will cost you about 5 percent more for the insulation, high efficiency windows, heating and air conditioning, compact fluorescent lighting and leak proof ducts. All are designed to save you money in the long term through energy efficiency and reduce the use of natural resources. It’s catching on. According to the Southface Energy Institute, nearly 2,000 Earth Craft homes will be sold in the Atlanta, Georgia metro area by the end of 2004, compared to three years ago when sales amounted to zero.

Organic groceries cost about 20 percent to 30 percent more than inorganic items, but prices are slowly becoming more competitive. Frequent

shoppers say paying a higher price is still worth it. Things like mad cow disease have fueled even more concern on the part of the consumer to watch what they’re eating and to seek out organic products. Nationwide, organic food sales reached \$13.5 billion in 2003. Organic and “green” items have been on the market for years but the selection was largely confined to health food stores. That’s not the case any more. Demand has raised the visibility of organics and availability is now as near as the local grocery chain.

So if you’re considering more eco-friendly purchases and experiencing label confusion about what is eco-friendly and what isn’t, here are a few tips...

When purchasing food, look for US Department of Agriculture certification. The USDA labels organic if the product contains 95 percent certified organic ingredients. Products with less than 70 percent organic content must be labeled as “containing organic ingredients”. However, strict uniform standards don’t exist for cosmetics and personal care items, so be careful.

We’ve all seen the “no animal testing” labels on products but the claim can be misleading. That’s why the Consumers Union, which publishes Consumer Reports, launched an eco-label website to help consumers distinguish between credible labels and marketing hype. The website, www.eco-labels.org analyzes 113 labels ranging from food and wood to personal care and cleaning products. The website is updated frequently and about 75 more labels will be added this month.

Several other websites to consider:

- For energy saving consumption and home building tips: www.southface.org;
- For advice on organic farming, gardening and food: www.georgiaorganics.org;
- To determine how much of an ecological footprint your lifestyle makes on the Earth: www.earthday.net/footprint/info.asp.

RESEARCH BRIEFS

Each month, the committee's staff researches and prepares a number of "briefs" on several topics relevant to the Joint Conservation Committee's mission. Very often, these briefs include references to reports and further research on the topics so that readers may pursue issues on their own.

New Fuel Economy Scenario Could Raise Costs More Than a Gas Tax

— Tony M. Guerrieri, Research Analyst

A report by the Congressional Budget Office concludes that all means of reducing gasoline consumption in the United States will be costly to consumers. The report, *"The Economic Costs of Fuel Economy Standards Versus a Gasoline Tax"*, examined three possible scenarios by which the government could achieve a ten percent reduction in gasoline consumption. Those scenarios include:

- raising fuel economy standards four miles per gallon (mpg) to 31.3 mpg for passenger cars and to 24.5 mpg for light trucks;
- raising fuel economy standards, but allowing companies to trade credits under this new standard; and
- increasing the federal gas tax.

The report concludes that raising the fuel economy standards under the existing corporate average fuel economy (CAFE) program would be the costliest route to achieve gasoline saving, costing consumers and producers an additional \$3.6 billion, and adding about \$228 to the price of every new vehicle sold.

The Energy Policy and Conservation Act of 1975 mandated CAFE standards. Currently, those standards are 27.5 mpg for cars and 20.7 mpg for light trucks, a standard that is set to increase to 22.2 mpg by 2007. All manufacturers that sell more than 10,000 passenger vehicles per year in the United States must comply with the standards. Under current law, producers that fail to meet a CAFE standard must eventually pay a penalty of \$5.50 per vehicle for every tenth of a mile per gallon that their fleet average falls short.

Producers would face higher manufacturing costs from adopting the new fuel saving technologies in their vehicles and a reduction in profits if they adjusted their pricing to increase the sales of their higher mileage vehicles, according to the report. While consumers with a relatively strong preference for fuel economy could come out ahead, on average, consumers would face

higher vehicle prices and, in effect, share compliance costs with the manufacturers.

Under the second scenario, increased fuel economy standards were combined with credit trading. Firms that exceeded one of the CAFE standards would generate credits that they would sell to firms that fell below that standard. The selling and buying of credits would be voluntary. This scenario still carries with it increased costs to consumers and producers, but reduces the cost increases by close to 16 percent - about \$3 billion per year - or about \$184 per vehicle.

Study: Gasoline use reduction measures will cost consumers money

Under the last scenario, the report examined the cost effectiveness of increasing the gasoline tax. The federal tax on gasoline has increased gradually over the years, from an initial rate of one cent per gallon to today's 18.4 cents per gallon. Including state and local taxes, which average about 22.6 cents per gallon, the average tax in the United States is about 41 cents per gallon. To achieve the same ten percent reduction using gasoline taxes, the CBO report estimates that a 46 cents per gallon tax would be needed.

The report suggests that by raising the price of gasoline through a tax increase, drivers would have an incentive to undertake a broad range of gas saving activities, including purchasing more fuel efficient vehicles, retiring gas-guzzlers earlier than they otherwise would have, driving less, driving more slowly and maintaining their vehicles better.

The report finds that this scenario would achieve the ten percent reduction in gasoline consumption at the lowest cost to consumers and producers - \$2.9 billion per year - or three percent less than the cost of increased CAFE standards with trading and 19 percent less than the cost of increased CAFE standards without trading.

The Congressional Budget Office report is available at the following Internet address: ftp://ftp.cbo.gov/49xx/doc4917/12-24-03_CAFE.pdf.

Mathematical Probabilities of Global Climate Change

—Jason H. Gross, Research Analyst

The journal *Nature* recently released a highly technical study called “*Extinction Risk From Climate Change*”. The study pools the resources of a number of leading climate change scientists to construct a complex statistical model of future climate change and risks to species up to the year 2050. The extinction risks of species are projected into three different models that are statistical renderings of the future performance of species given current projections of climate change. The study does not contain policy recommendations, but instead stands as a mathematical construction of the damage climate change would be expected to do to world species if the current environmental path is not altered.

According to the report, climate change over the past 30 years has already produced numerous shifts in the distribution and abundance of certain species. Using mathematical projections of species distribution under future climate change scenarios, the study projected extinction risks for sample regions that cover about 20% of the Earth’s terrestrial surface. According to the study, given mid-range climate-warming scenarios for 2050, up to 37 percent of species in the sample regions will be on the road to extinction.

According to the report, the biggest threat to species is global habitat loss

The three models each show different levels of extinction: the low estimate at around 18%, the mid-range estimate at 24%, and the maximum extinction level at 37%. The three different model estimates show the importance of rapid implementation of technologies to decrease greenhouse gas emissions and to employ carbon sequestration technology.

Species tend to react strongly to climate changes. The past responsiveness of species to recent and past climate change raises the possibility that anthropogenic climate change could act as a major cause of extinctions in the near future. According to the study, the earth is set to become warmer than any period in the past 40 million years. While past critics have argued against anthropogenic causes of global climate change, recent studies have shown that man is the single biggest contributor to climate change in the world today.

Each species used in the modeling process was matched against climate variables such as temperature,

precipitation, and seasonality. Because climate change can affect the distribution area of each species as a whole, independent classical community-level approaches to modeling climate change cannot always be used. The study used changes in the summed distribution areas of all species as a different approach to determining how species reacted to climate changes. This approach shows that destruction of half a habitat results in the loss of the distribution area of all the species confined to that habitat. It also reveals an interrelation of species and their communal reaction to climate change. This modeling strategy’s downfall is that it tends to over-predict extinction in species that have a wider habitat area.

To address problems in the first modeling method, the study employed the second method that used the average proportional loss of a distribution area of a species to estimate the number of that species that would become extinct. This modeling approach is more similar to the real world species to area relationship because in this model, halving the habitat area leads on average to a direct proportional loss of half the distribution loss of that particular species.

The third modeling method considers the extinction risk of each species as an individual species — one at a time. Under this model, the fraction of species that are predicted to become extinct is equivalent to the probability of extinction for each species, not for an area or for species in general. In other words, the predictive model is not completely dependent on an area in which that species is distributed, nor is it linked to other species. Under this method, the extinction risk of each species is determined separately by substituting the area of habitat that is lost for each particular species.

All three of the methods are combined and averaged in the study so that no one model would have too much influence on the final predictive data. Although there are data gaps, a statistical model is used to produce estimates for missing data in the extinction risk table that is published in the study.

News to Use in the Environmental Synopsis... share it with a friend

The *Environmental Synopsis* is issued monthly. The newsletter examines timely issues concerning environmental protection and natural resources.

If someone you know would like to receive a copy of the *Synopsis* each month, please contact the committee office at 717-787-7570.



Printed on Recycled Paper

According to the report, the biggest threat to species is global habitat loss. When the species-to-area relationship data (described above) is matched with changes in global land use that have taken place since human land conversion began, estimates in extinction range from 1% to 29%. The study notes that a high proportion of the world's species reside in tropical forests. As a result, global extinction related to habitat loss would be expected to be approximately 24% by the year 2050.

The study, while dry and highly mathematical, shows the stark reality of climate change projected into the future. For more information and a copy of the study visit *Nature's* website: <http://www.nature.com> and this specific address: http://www.nature.com/cgi-taf/DynaPage.taf?file=/nature/journal/v427/n6970/full/nature02121_fs.html&content_filetype=PDF.

Survey Shows Disparity Between Perception and Reality of Recycling Rates

— Tony M. Guerrieri, Research Analyst

Despite steadily declining aluminum can recycling rates, more than two-thirds of Americans report they are recycling aluminum cans, suggesting a disparity between their words and their actions. That's the conclusion of an industry survey conducted for Alcan Inc. by Leger Marketing, a New York City consulting firm.

The survey, *"Attitudes of Americans Toward Recycling"*, finds that about 70 percent of those surveyed said they recycle aluminum cans, always or often. Almost half of respondents (44 percent) say they recycle more aluminum cans now than they did five years ago. Only 19 percent reported recycling less during the past five years. But, the report notes, nearly half of all recyclable aluminum, worth an estimated \$800 million, winds up in landfills.

Aluminum is the only recyclable packaging material that has the ability to be recycled forever – from can to can without deterioration in quality or value. Aluminum is also the most valuable packaging material, earning many times more for its collection in curbside recycling programs than other beverage containers. In fact, aluminum is the only recyclable material that more than pays for its own cost of collection and processing.

When questioned on the importance of recyclable containers when deciding to purchase a beverage, half the respondents said they considered them important. One-third of respondents (33 percent) considered it to be very important and 17 percent considered it somewhat important. A sizable minority (27 percent) rates the importance as low.

Other survey findings explored why Americans do not recycle more. Results pointed to convenience and education as major factors. Of those who do not recycle, 32 percent cited the lack of a convenient recycling container or center; 21 percent said they do not have curbside recycling available; 12 percent said they dislike the clutter or mess; 12 percent said they do not like taking the cans to the recycling center; while six percent said recycling is not important to them.

Survey respondents rated the impact of actions that government or other organizations could take to encourage them to increase the recycling of aluminum cans. Forty-five percent said increasing the number of recycling centers or containers in the community would be very effective, 41 percent said more public education about the environmental benefits of aluminum can recycling would be very effective, while 37 percent thought more public education about the monetary benefits of aluminum can recycling would be very effective.

More than two in five, 43 percent, said placing a fee on beverage containers that is refunded when a container is returned would be "very effective" in encouraging them to recycle.

What would lead you to recycle more?

According to the survey, the U.S. public does seem potentially receptive to change, depending on the message. Of four messages tested, the message with the most impact was "Creating new cans from recycled ones saved an amount of energy equivalent to that of 15 million barrels of oil." Two-thirds (65 percent) said this statement affected them a lot. "The dollar value of aluminum cans that went into landfills instead of being recycled last year was \$800 million," ranked second with 55 percent and "Each aluminum can recycled conserves enough energy to power a television for three hours" was third with 52 percent.

The statement that perhaps needs to be "recycled" itself was "A can from the recycling bin, through the recycling process and back on the store shelf filled with your favorite beverage in as little as 60 days." Only 38 percent indicated it would affect them a lot.

Alcan is one of America's largest recyclers, and in North America alone, recycled more than 24 billion aluminum cans in 2002, representing 40 percent of all cans recycled. It operates the world's largest aluminum can recycling plant in Berea, Kentucky.

For a copy of the survey go to [http://www.alcan.com/web/publishing.nsf/attachmentsbytitle/pressreleases-docs/\\$file/report_alcan_10_03.pdf](http://www.alcan.com/web/publishing.nsf/attachmentsbytitle/pressreleases-docs/$file/report_alcan_10_03.pdf).

U.S. Manufacturers Explain Threats to Global Competitiveness

—Jason H. Gross, Research Analyst

According to the National Association of Manufacturers, the U.S. manufacturing sector finds itself struggling with sluggish recovery and eroding competitiveness in export markets. A report recently released by the association entitled *“How Structural Costs Imposed on U.S. Manufacturers Harm Workers and Threaten Competitiveness”* contains highly technical economic data that lays a scientific foundation for understanding the barriers that U.S. manufacturers face in competing in the global marketplace.

International trade trends have shifted sharply in recent years to the detriment of U.S. manufacturers. The U.S. share of world manufacturing exports, which increased from 12 percent to 14 percent in the early 90s, has declined sharply in the past five years, while import penetration into the U.S. market has risen quickly. Much of that penetration results from newly industrialized countries beginning to move into high value-added markets such as vehicles, industrial machinery, and electronic equipment. Historically, these manufacturing sectors have been dominated by industrialized nations. According to the report, however, increased foreign competition from countries with cheaper raw materials and lower wages is damaging the ability of U.S. manufacturers to compete globally.

The report states that a common misperception is that most of the trade imbalance stems from textiles, clothing, footwear and other traditionally labor intensive products whose manufacturing is most often sent overseas where labor is cheaper and does not abide by our fair-labor practices. Often in the past, these products could not compete with U.S. based companies because the products produced overseas were inferior in quality to similar U.S. produced products. This may have been the case 10 years ago, but is no longer the case today. Because the equipment used to manufacture these products is lower in cost and more widely available to overseas companies, they are able to manufacture quality products that compete with U.S. manufactured products.

The report states that comparatively high corporate tax rates are a major burden on U.S. manufacturers compared to foreign competitors. This acts as a drag on U.S. competitiveness because it constrains after-tax cash flow, discourages establishment of foreign manufacturing facilities in the U.S. and encourages the migration of U.S. manufacturing to lower-tax jurisdictions. All these factors stifle U.S. manufacturing and provide incentives for companies to send their manufacturing base to foreign countries.

Another major concern for U.S. manufacturing is the escalating cost of providing employee benefits. These costs raise the overall cost of doing business and inhibit providing cheaper value-added products to the consumer. The U.S. differs dramatically from its competitors in that U.S. employers are required to provide health benefits. In many competing markets, the government - instead of the employer - is responsible for providing all or a large portion of health benefits to workers. The report states that while employer-provided benefits have advantages over publicly funded models in quality, choice and flexibility, the cost incurred by the manufacturer stifles its global competitiveness.

Without a variety of changes, the report casts doubt on the future of U.S. global competitiveness

Another issue raised by the report is that the cost of regulatory compliance - estimated to be the equivalent of a 12 percent excise tax - can be regarded as the silent killer of manufacturing competitiveness. Regulations are often developed without objective cost-benefit analysis and have risen steadily in quantity and complexity, overburdening manufacturers' attempts to comply.

The report has several recommendations on how to return U.S. manufacturing to a competitive level. The report's position is if some of these proposed changes are not adopted, the U.S. will not be able to compete in the global manufacturing marketplace. Among the report's recommendations are:

- reform tax laws to reduce statutory corporate tax rates and eliminate the taxation of after-tax profits and dividends;
- enact health reforms to provide for a closer connection between the level of service received and patient expenditure;
- implement greater individual responsibility for coverage of health costs in order to reduce the incidence of expensive but preventable chronic health conditions;
- enact legal reform to discourage frivolous lawsuits and to eliminate joint and several liability and product liability;
- develop national standards for punitive damage awards and place limits on the award amounts;
- establish a more objective cost-benefit review process for all proposed regulations; and
- update regulations on a periodic basis to take into account adverse regulatory impacts on business and jobs.

For further information or a copy of the full report visit www.nam.org/costs.

ON THE HORIZON . . .

A LOOK AT UPCOMING EVENTS

- ✓ **Monday, March 29, 12 noon, Hearing Room 1, North Office Building, Capitol complex, Harrisburg, PA - Environmental Issues Forum** (rescheduled from February 17). Pennsylvania Department of Conservation and Natural Resources (DCNR) Secretary Michael DiBerardinis will be the guest speaker. Sec. DiBerardinis will discuss the information gleaned from his series of meetings around the state last year, and the department's action plan for 2004 and the future.
 - ✓ **Thursday, April 8, 10 a.m., Penn Stater Conference Center Hotel, 215 Innovation Blvd., State College, PA – Forestry Task Force Meeting.** The task force will hear from Harry V. Wiant, Jr., the Joseph E. Ibberson Chair at Penn State University, regarding the Chair and its mission, and discuss the USDA Forest Service's National Woodland Owner Survey.
 - ✓ **Monday, April 12, 12 noon, Hearing Room 1, North Office Building, Capitol complex, Harrisburg, PA - Environmental Issues Forum.** Pennsylvania Department of Environmental Protection (DEP) Secretary Kathleen A. McGinty will be the guest speaker.
 - ✓ **Tuesday, May 11, 8:30 a.m., Crowne Plaza Hotel, 23 South 2nd Street, Harrisburg, PA – Environmental Issues Forum.** The forum will be held in conjunction with the Pennsylvania Municipal Authorities Association's (PMAA) Legislative Day, and will feature discussion of legislative issues of importance to PMAA and other Legislative Day participants.
- Environmental Issues Forums are open to the public. Please call the committee office at (717) 787-7570 if you would like to attend. Also, check out the committee website at <http://jcc.legis.state.pa.us> for upcoming forums as they are scheduled.

COMMITTEE CHRONICLES . . .

REVIEW OF SOME MEMORABLE COMMITTEE EVENTS



A topic on many minds these days is development of alternative sources of clean fuel, and it is an issue on which the Joint Committee has focused its attention. At one of the committee's recent Environmental Issues Forums, the guest speaker was John W. Rich, Jr. (photo at left). Rich is president of Waste Management and Processors, Inc. (WMPI) of Gilberton, Schuylkill County, PA. WMPI is pursuing a cutting edge technology project to produce clean-burning diesel fuel from coal waste.

In the photo at right, Rich (left) discusses the project with PA House members Bob Allen (center), chairman of the House Labor Relations Committee, and Bill



Adolph, chairman of the House Environmental Resources and Energy Committee.
To learn more, check out the Ultra Clean Fuels website at www.ultracleanfuels.com.

What really caught my eye, however, was the census report's figure of how many people drove to work alone in America — about 77 percent in 2002, up from 73 percent in 1990. In Pennsylvania, 87 percent drove a car, truck or van to work, 79 percent drove alone and only 8.7 percent carpooled. Compare that to the 1990 census, which showed that 71.4 percent drove alone, 13 percent carpooled and 6.4 percent used public transportation. In 1990, the average travel time for a worker's commute was 21.6 minutes in Pennsylvania.

Nationwide figures track a similar trend when it comes to carpooling. In 1980, 23.5 percent of workers carpooled. By 1990 that had dropped to 15.4 percent. In the 2002 survey, the figure has dropped to 10 percent.

Is it any wonder that highways are more congested? And with more people on the road driving in solitary splendor, air quality and fuel consumption take a back seat to convenience.

Anthony Downs, a senior fellow in Economic Studies at the Brookings Institution has written two interesting articles about traffic congestion and Americans' driving habits. In his policy brief entitled *Traffic: Why It's Getting Worse, What Government Can Do* (www.brookings.edu/comm/policybriefs/pb128.htm), Downs acknowledges that, "Congestion has become part of commuters' daily leisure time, and it promises to stay that way." He notes, however, that sometimes congestion is a sign of a healthy economy and prosperity. He does, perhaps inadvertently, speak in favor of shared rides, however, when he says, "For the time being, the only relief for traffic-plagued commuters is a comfortable, air conditioned vehicle with a well equipped stereo system, a hands-free telephone, and a daily commute with someone they like."

Do you believe that traffic "...congestion has become part of commuters' daily leisure time..."?

Downs has also written a brief entitled *The Need for Regional Anti-Congestion Policies* (www.brookings.edu/urban/publications/20040220_downs.htm). He notes a number of costly supply and demand side policies to attack congestion, but notes that "...effective anti-congestion policies also involve many elements other than the planning and creation of new infrastructure elements." And some are not necessarily big-ticket items — coordinating traffic signals, reconfiguring two-way streets into a system of one-way streets, ramp metering to control vehicle flows onto expressways, for example.

Pennsylvania's General Assembly is preparing to take up a budget that calls for increased road construction funding, an increase for mass transit and efforts to make greater use of alternative fuels. The federal government, meanwhile, is working on reauthorization of its transportation law, the Transportation Equity Act for the 21st Century (TEA-21). Perhaps it's an opportune time to re-examine some of the "little" things that can be done to "...conserve fuel, improve air quality and ease traffic congestion."

Ride sharing would seem to be one simple step, but someone has to take that step to make it attractive. Maybe link it with a "parking cash-out" incentive program? And perhaps there are other ideas. We should be looking for them.



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