



# New Solutions

## Peak Oil Activists Remain Optimistic Despite Country's Financial Meltdown

By Megan Quinn Bachman

**P**eak Oil activists from across the nation gathered at a college outside of Detroit over the Halloween weekend to confront the scary prospects of declining worldwide oil production – and to focus on how they and their communities can cope.

Despite grave reports of imminent and permanent falloffs in oil production, combined with financial meltdown and climate instability, participants at the Fifth U.S. Conference on Peak Oil and Community Solutions left with strategies to dramatically cut energy use – plus the optimism that they can accomplish much.

“People can find ways to lead happy, fulfilling lives even as this doomed system crumbles all around them,” Russian immigrant writer Dmitry Orlov told the 250 conference attendees at the longest running annual Peak Oil conference in North America, this year a joint effort of the Yellow Springs, Ohio-based Community Solutions and the Upland Hills Ecological Awareness Center, and held at Oakland University in Rochester, Michigan.

Other speakers offered ways to make needed lifestyle changes – from creating household self-reliance to securing water supplies and increasing soil fertility, saving gasoline with innovative ridesharing solutions using cell phones and the Internet, cutting utility bills by retrofitting homes to use 80 percent less heating and cooling energy, and installing solar hot water systems. Community-level strategies were offered with presentations on creating resilient communities and forming Transition Towns, a community process for economic re-localization which started in England.

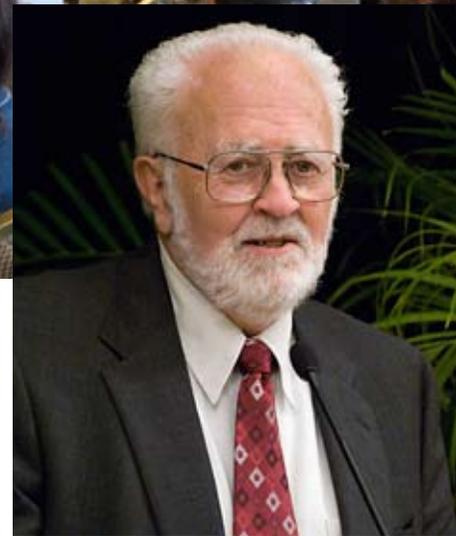
Pat Murphy, executive director of Community Solutions, said that cooperating, sharing and curtailing in community must triumph over competing, hoarding



and consuming. “Consumerism took our souls, but community will return them,” Murphy said.

Murphy, author of *Plan C: Community Survival Strategies for Peak Oil and Climate Change*, focused on our severe economic challenges. He said that while Peak Oil could mean a slow decline in our standard of living and climate change could eventually make the planet uninhabitable for humans, we now also face a financial crisis that may require involuntary and immediate curtailment of energy and resource use.

Orlov described the five stages of economic collapse underway in America today. He noted that the financial collapse has already begun with the disintegrating credit pyramids and the bailout treadmill, in which foreigners either buy our debt or it's monetized, causing hyperinflation. He said the signs of commercial and political collapse are also becoming clear, as global



Top: Dmitry Orlov compares the situation of the U.S. to the former Soviet Union.

Above: The conference was organized around Pat Murphy's recent book, *Plan C: Community Survival Strategies for Peak Oil and Climate Change*.

shipping slows, big box retailers struggle, and states experience major budget shortfalls and slash government programs.

“Customer service comes to mean that customers must provide a service,” Orlov, author of *Reinventing Collapse: The Soviet Example and American Prospects*, said of a

[continued on next page](#)

fast-approaching time when skills mean more than money. He also foresees shifts in consumption from “all you can eat” to “all you can scrounge” and from buying new products to the mantra of “keep it running.”

Orlov touched on the importance of community in concluding that we could avoid social and cultural collapse, but it would require that people extend personal virtues of generosity, compassion, and charity beyond family and friends to a wider circle “who matter to us, and we to them.”

Author John Michael Greer suggested to participants that a “window of opportunity” was opening for the peak oil movement, in which we can re-define what’s practical, possible, and necessary for survival. He said that similar opportunities arose during the Great Depression and in the 1970s oil crises.

He said that in the 1930s this led to the government adopting previously radical ideas, such as government insurance of bank deposits, Social Security, and legalized labor unions, and in the 1970s to recycling, organic agriculture, appropriate technology and alternative energy.

Greer, author of a just-released book, *The Long Descent: A User’s Guide to the End of the Industrial Age*, argued that highly volatile oil markets with record high price



Keynoter John Michael Greer talking with ASPO-USA co-founder Dick Lawrence, who travelled from Massachusetts to attend the conference.

spikes have helped to shift the energy discussion. He quoted former U.S. Energy Secretary James Schlesinger’s famous comment that America has only two modes of response to energy issues – complacency and panic. He said that peak oil activists have gotten used to complacency as a way of life and forgotten, “how quickly panic can take hold and get very large numbers of people thinking about the unthinkable in a hurry.”

Greer ended his talk with an inspiring

possibility: “The grandchildren of our grandchildren will tell their grandchildren stories about this time, the time when everything changed. And what each one of us does this weekend, and in the months and years that follow, has the power to shape those stories far into the future.”

Peter Bane, editor of *Permaculture Activist*, advised how to increase household and community self-reliance, such as by securing and storing water supplies, using humanure to increase the fertility of depleted soils, utilizing weeds for medicinal purposes, and sharing our houses. “The quickest way to reduce our ecological footprint is to share things,” he said, adding that while the previous period in human history was about moving away from our communities due to the availability of cheap energy, the next period will be about returning home, where “your help and warmth is needed.”

Food activist Chris Bedford talked about how to get communities to use local, organic food as an economic development strategy and persuade schools to purchase healthy, local food. He stressed the importance of organic agriculture, which is as productive as conventional agriculture in good times, but twice as productive during droughts. He foresees organic farming as the high knowledge job of the 21st Century, and a coming identity crisis



New Society Publishers was one of the organizations featured at the conference’s “Green Expo.”

for conventional farmers when they realize they don't know how to grow food without fossil fuels.

John Richter, from the Institute for Sustainable Energy Education, gave an overview of renewable energy. He said that despite great potential, renewable energy constitutes only a small percentage of U.S. energy production, is more expensive than fossil fuels, and provides only intermittent power. Richter cited subsidies being misdirected into fossil fuel production as a continuing challenge and concluded that renewable energy is only a partial solution. "Curtailement, or at least serious conservation, is also needed," he said.

Passive House specialist Katrin Klingenberg discussed her vision for reducing home heating and cooling energy use by up to 90 percent by insulating the building shell (roof, floors and walls) and making it airtight, using a heat recovery ventilation system, creating thermal breaks to reduce



Housing was a key topic. Katrin Klingenberg (top) gave a presentation on the Passive House concept. Linda Wigington (above), of Affordable Comfort, Inc., also took part along with Klingenberg, in one of the topical roundtables on housing.

loss of heat through highly conductive materials, and using highly rated windows and doors with thermal breaks built in. "These create steady indoor temperatures that won't drop below 50 degrees without a heating source," she said, explaining that her own 1200 sq. ft. Passive House is so efficient that she can heat it with a hairdryer.

Several innovative post-peak oil transportation schemes were proposed at the conference. A short-term solution, which uses the existing infrastructure of roads and cars, was the "Avego" shared transport system, a new service that aims to fill empty car seats through GPS technology, cell phones and web services. Sail boating was presented as a long-term utility which requires little maintenance or industrial infrastructure, and since its energy source is wind, is truly sustainable.

Localization activist Michael Brownlee presented the Transition Towns model as a way for people to work in their communities towards re-localizing production of food and other goods, plus services. He quoted Transition model creator Rob Hopkins, who defined the Transition movement as a "creative, engaging, playful process, wherein we support our communities through the loss of the familiar and inspire and create a new lower energy infrastructure which is ultimately an improvement on the present." Among the "resilience indicators" for communities that he proposed were the percentage of food produced locally, the ratio of car parking space to productive land use, and the number of 16-year-olds able to grow 10 different varieties of vegetables.

Community Solutions Outreach Director Megan Quinn Bachman described her vision of a community economy, in which essential needs are met close to home and security is not defined by how much money we accumulate, but in the acquisition of valuable skills, the support of neighbors, and the maintenance of healthy, diverse, and productive habitats. Voluntary changes and sharing resources will be critical, she said, warning of the dire implications of fierce resource competition during an energy decline.

Author and Peak Oil educator Richard Heinberg, speaking via webcast, said it



John Richter called for curtailement, or at least serious conservation, in addition to renewables.

was important to act from the bottom up because power holders enthralled to their vested interests won't lead the transition to lower energy use. He called for developing crisis management and disaster response programs and contingency plans to deal with coming economic hardship. "We need a way to circumvent political polarization and revitalize culture while addressing the immediate economic crisis," he said. "Now is the time for alternative movements to stop being alternative," Heinberg concluded. "We need to become the mainstream."

Participants left Oakland University inspired to put to work what they had learned about cutting energy use. One described the conference as a "kick in the butt" to get moving and another said, "I realized the power that resides in my own choices and the decisions of my own community."

George Perkins, a participant from Louisville, KY, echoed a similar view of the need for both personal and community empowerment. "This conference reinforced a sense of urgency to make significant personal changes and raise awareness in my community," he said. ■

Megan Quinn Bachman is the Outreach Director of Community Solutions.

### Couldn't attend the conference?

To read or download conference presentations or order DVDs of the event, visit [www.communitysolution.org/08conf.html](http://www.communitysolution.org/08conf.html).

# Energy – Cause of the Current Economic Crisis?

By Dr. Robert Brecha

Analysts looking at the recent collapse in stock market values have traced the current problems back to the U.S. housing market, careless lending practices by banks and the obscure packaging for re-sale of loans. While the house of cards upon which the U.S. mortgage industry was built is a leading symptom of the broader problems in the economy, the buck does not stop at sub-prime loans.

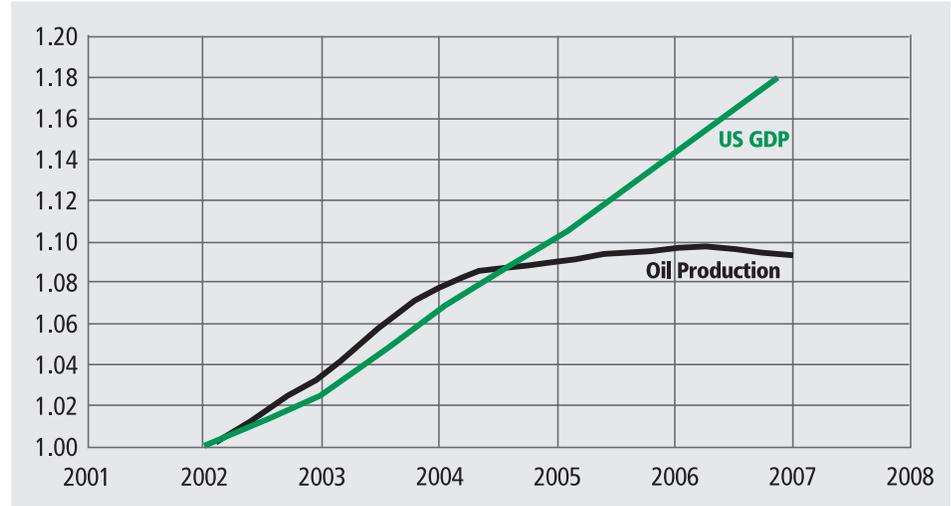
A crucial question to ask is: why did these sub-prime loans become problematic? Once borrowers started to default on loan payments, the tremendous exposure of lending institutions was revealed, and the walls came tumbling down. However, there was a deeper cause that led to an increase in defaults. Behind the visible symptoms of a weak housing market, one must consider once again the prime mover of the world economy – energy.

Economic growth in the past several years was accompanied by steadily rising energy prices, especially of oil, but also of natural gas, uranium, and even more recently, of coal. Together, these fuels represent over 90 percent of the energy consumed by the U.S. Although energy intensity (energy per dollar of GDP) in the U.S. has decreased since the 1970s, the rise in energy prices over the past few years has resulted in a return to nearly the 1970s level of energy spending compared to GDP. Unfortunately, we have missed the opportunity presented over the past few decades to become more energy efficient, especially as compared to some of our economic competitors.

However, a new dynamic has entered into the equation more recently. During the economic boomlet of the past few years, it has been interesting to notice that new world petroleum production has lagged behind demand, thus leading to higher prices across the board. In fact, during the past three years of particularly strong economic growth, petroleum production has been essentially flat – the first time in the history of our fossil-fuel-based economy that strong economic growth and high prices did not summon forth the requisite supply increases needed to drive prices back to a “normal” equilibrium level.

We may very well have entered into a

Figure 1: U.S. GDP and World Oil Production (relative to 2002)



GDP has continued to climb, whereas world oil production has been stagnant, leading to strongly increasing prices. A plot of world GDP would look very similar.

new phase of world economic development in which supplies of finite fossil fuels will not be able to keep up with growth in demand for energy. It can be expected that each time the world begins to recover from an economic slowdown, such as the recession of the early 2000s or from the current severe recession, demand for fossil-fuel energy will rise. In this new paradigm, however, production will then quickly reach limits imposed by the availability of relatively inexpensive resources. This dynamic will rapidly drive up energy prices again, and result in the destruction of demand leading to another economic downturn.

The comparison shown in Fig. 1 between oil consumption and GDP in the time period before 2004, and the lack of rising oil production from 2004 through 2007 helps explain fairly well the strong rise in oil price we experienced until August 2008. As demand increases because of economic growth, stagnant supply implies a rising price. (The supply side of the equation, that rising prices will call forth increases in supply, has only limited effectiveness in a world of finite resources.)

The figure also helps explain why the price of oil fell again very suddenly as demand destruction set in when economies in the U.S. and around the world slid into recession. Plunging demand sent the world energy system back into a regime in which suppliers are not straining against a ceiling in production capacity, thereby relieving

the upward pressure on prices. Thus, up to a point, the laws of supply and demand do seem to work reasonably well.

Returning to the premise of this piece, the smoking tailpipe behind the housing market crisis is, to no small extent, the rise in energy prices over the past several years. As gasoline prices and heating costs doubled, and then tripled, homeowners had to begin making difficult but real choices about paying utility bills, buying food, putting gas in the car, or making mortgage payments. Just a few months ago, we were concerned about high inflation, due in part to rising food prices, also caused by high energy costs; again, the root cause of this was energy scarcity, and high prices were forcing choices among households.

A natural outgrowth of these choices is an increase in the number of those who could not make minimal payments, and the rate of defaults on home mortgages began to rise. In a society where savings rates are essentially zero for much of the population, there is no cushion available when times get hard. Of course, the problem was exacerbated by mortgage lending practices such as zero-down payment, interest-only loans with enticing initial interest rates that were then reset with much higher monthly payments. Fundamentally, however, the cause of increased defaults was not that the loans were made and then re-packaged, but rather that energy prices helped trigger a decrease in the ability of homeowners to make payments.

Yet another key part of the current dynamic is contained in the redistribution of wealth from the middle class to a small segment of the upper class since the 1970s and the even more rapid redistribution upward to the top 0.1% over the last few years. Had real wages for most workers not been falling or barely holding steady, it might have made sense to take on larger mortgages as an investment in the future. The combination of stagnant income, ballooning payments, and sky-rocketing energy costs, however, was simply too much to bear, resulting in the downward spiral of mortgage defaults, massive layoffs, and further defaults. While energy prices have declined amidst the turmoil, the damage has already been done.

Data from the Department of Energy's *Buildings Energy Data Book*<sup>1</sup> show that since the last energy crisis, average homes have grown larger, with an increase in just the past 20 years alone of about 30 percent. Most importantly, energy expenditures have also increased significantly, by at least 50 percent from 1990-2007.

There are several indicators that have been overlooked in most mainstream-media commentaries on the current crisis. First, a comparison of housing markets around the country during the initial stages of the downturn showed that homes closer to major metropolitan areas were not losing value at nearly the rate of large houses in exurbia.<sup>2</sup> Homeowners looking for some financial relief were lowering both their transportation costs and their space conditioning costs by moving to a new home closer in; at the very least, they were no longer looking to buy McMansions in the exurbs. This seems to indicate that energy costs are playing a significant role in home-buying decisions.

A second indicator that usually precedes an economic turndown is a decreasing rate of growth in vehicle-miles-traveled (or nearly equivalent, in the amount of gasoline consumed). That is, for any given quarter, if data shows that we are driving less, or even that the number of miles driven is increasing more slowly, it is a good bet that an economic slowdown is on the way.

Over the past several months we have seen the largest decreases in miles driven (not just lower *rates* of growth) in decades,

which could indicate that this current recession will be a long one. The decrease in driving and, more importantly for the future, the plummeting sales of large U.S.-manufactured vehicles, are trends that have severe economic repercussions, but both of these started well before the sub-prime meltdown moved into full swing.

Unless we recognize that there is a key underlying cause for the economic crisis that is just now in its beginning stages, it is hard to imagine how we will find effective solutions to the problem. Although it is not a popular idea in the United States, one critical effort we must make from now on is to learn how to use significantly less energy of all kinds. We have ample room to make energy-efficiency improvements, and although some of these measures will take capital investments, initially, they are among the only expenditures that one can make in a home that will actually pay off and, effectively, *generate* extra income in the future.

There are other reasons to follow the path of increasing energy efficiency and, along the way, of making a transition to use of renewable energy sources, including mitigation of the most severe consequences of climate change and enhancement of national security. In the midst of an economic crisis of this magnitude, however, it seems that the best argument for energy efficiency measures is that they can provide relief to financially strapped citizens. Done well, a comprehensive energy efficiency program could also serve to generate jobs, since every community in the country will be making similar efforts.

In the end, there is simply no downside to following the path of using less energy, and it may be the only long-term possibility for emerging from this crisis and preventing similar ones in the future. ■

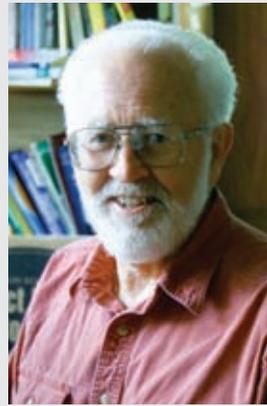
Robert J. Brecha, Ph.D. is the Bro. Leonard Mann Chair in the Natural Sciences and Professor, Dept. of Physics and Electro-optics Program University of Dayton, Dayton, OH 45469-2314. Phone: (937) 229-2727. Email: brecha@udayton.edu.

#### References

1. <http://buildingsdatabook.eren.doe.gov/>

2. See, for example, the report "Driven to the Brink," online at <http://www.ceosforcities.org/newsroom/pr/files/Driven%20to%20the%20Brink%20FINAL.pdf>.

In the last issue of *New Solutions*, we introduced the concept of "Peak Debt," suggesting that the real crisis of our time might come from our inability to *afford* fossil fuels. This was immediately prior to the current economic collapse, and has proved prophetic. In this issue, Bob Brecha shows how Peak Debt and steep rises in energy costs may be the fundamental reason behind our current crisis. I too have spent time investigating the role of debt in our societal difficulties. You can see the results of that thinking in my article on the following pages.



We recently held our Fifth U.S. Conference on Peak Oil and Community Solutions – Plan C: Community Survival Strategies for Peak Oil and Climate Change. This year's conference was co-sponsored by the Upland Hills Ecological Awareness Center, and held at Oakland University in Rochester, Michigan. More than 250 people attended. Megan Quinn Bachman offers her summary of the conference as our lead story.

In December, we launched the Community Solutions blog, which you can link to from our website. We've done a few postings and started to generate some discussion you may find interesting... join in the conversation!

A recent posting on the blog was written by Rob Content, our Program Manager, in which he looks at the Obama plan for energy, and finds it lacking. It's classic Plan B, or "green technology will save us." As we have often pointed out to people, this is a very high risk option. I urge you to check out the post.

Over the past few months, I've attended and spoken at several "passive house" venues. This housing aspect of Plan C is one area into which we're putting a lot of our efforts. In fact, we have a film underway which documents the efforts of many people to drastically reduce home energy consumption, both in new homes and buildings as well as in retrofitting old ones. We'll keep you updated on the film's progress.

Let's all work for a great new year. ■

– Pat Murphy

# Plan C and Debt – Defining a New Renaissance Man

By Pat Murphy

In my book, *Plan C: Community Survival Strategies for Peak Oil and Climate Change*, I contrast the need for curtailing energy consumption with a theoretical Plan A (Business as usual – find more oil) and Plan B (Business as usual – just add wind, solar and biofuels). Advocates of Plan A and Plan B emphasize that there is no need for any change in lifestyle emphasizing that technologies of various types, either “black” or “green,” will allow the American standard of living to be maintained indefinitely.

But suddenly, with no apparent warning, the credit/debt system – which is core to Plan A and B – has failed for reasons which are still unclear. In hindsight, one can find authors such as Ken Phillips (*Bad Money – Reckless Finance, Failed Politics, and the Global Crisis of American Capitalism*) and Robert Shiller (*The Subprime Solution – How Today’s Financial Crisis Happened and What to Do About It*), as well as some members of Congress, who warned about the potential for a financial crisis similar to what we are experiencing. Part of the problem was due to the inventions of credit worthy “financial instruments” (aka Ponzi schemes) and the government push to make bad loans via Fannie Mae and Freddie Mac. Now the government is desperately printing money (electronically of course) and giving it to the banks and investment houses to delay their possible bankruptcies. The first decade of the 21st century is remarkably similar to the period of the 1920s which led to the Great Depression, including an excessive increase in the money supply.

Plan C calls for a more frugal approach to living – a way of life based more on relationships, caring and sharing rather than one of material accumulation, hoarding and competing. The book includes powerful arguments for voluntarily disentangling ourselves from a focus on obtaining as many goods and services as possible and making consumption the reason for existence. The credit crisis, which is really a debt crisis (since people cannot repay money they have borrowed), is now forcing people toward such a frugal approach.

The government, desperate to maintain the status quo of consumption, continues to provide funds to lending institutions. This is essentially creating government debt, since private debt sources are no longer available to the extent they were before. The advantage for the government is that there are few payment terms and the actual repayment of the debt can be off-loaded to subsequent generations

We watched our savings decline as life went on with our organizational activities, which included participating in the Third Annual Passive House Conference in Minnesota. At this conference, Stephan Tanner (the first person in the U.S. to build a house that uses 80 percent less energy than conventional buildings – the Passive BioHaus in Minnesota) argued that we needed to define a New Renaissance Man who would follow industrial man – now heading for extinction. Stephan’s BioHaus represents the concept of frugality – it is small, extremely well built and well insulated and uses very little energy.

I asked myself what a new Renaissance person would look like in terms of our modern financial system. In the past, religions considered usury (earning interest on loans) a sin – although various interpretations also define this as excessive interest. In Shakespeare’s *Hamlet*, 1603, Lord Polonius says “Neither a borrower nor a lender be; for loan oft loses both itself and friend, and borrowing dulls the edge of husbandry.” Is there an economy that can operate without making loans and charging interest? In an 11/13/08 article “America’s Economic Crisis Is Beyond The Reach of Traditional Solutions,” Paul Roberts, former Secretary of the U.S. Treasury, notes that “consumer debt expansion is the fuel that kept the U.S. economy alive.” He goes on to say that, “The growth of debt has outstripped the growth of income to such an extent that an increase in consumer credit and bank lending is not possible.” This is not news. He might have extended that to say a decrease in consumer credit and bank lending is inevitable.

I’m not sure how Stephan financed the BioHaus. One unlikely possibility is that he saved money for the building. I think



Stephan Tanner (top) argues the need for a New Renaissance Man dedicated to frugal living. This Waldsee BioHaus (above) is the first built in the U.S. that uses 80 percent less heating and cooling energy than conventional buildings.

a New Renaissance Person would have done exactly that. Such a person might reconsider the whole approach to buying a house. He or she might reject the concept of borrowing from the bank. That person might simply save the money necessary to buy or build.

The popular press notes that 20 percent of economic activity was in the financial sector (lending and insurance), now down to 12 percent and dropping. About 18 percent of our incomes go into servicing debt – close to the 20 percent financial sector part of the economy. Another popular financial number is that people should spend about 2½ to 3 times their annual income to buy a house. If these are good

approximations, it would mean that a person operating on a cash basis could save 18 percent of their income for about 15 years to get the price of a house. And assuming that 18 percent savings could continue for 45 years, the person would have saved about eight years of income.

People are now becoming more aware of the credit/debt problem in the same way they became more aware of Peak Oil and other resource peaks (along with climate change). And people are beginning to see that this historical credit/debt period may well be as short as the fossil fuel era – two to three centuries. Credit and debt have reached their peak (likely in the same year, 2008, as oil production reached its peak) and life will become very different.

Why has this happened? The current debt crisis is showing the chicanery and immorality of the financial corporations, with the support of the federal government, whose members are under constant onslaught from financial lobbyists. What we need to understand is that it is not the recent excesses but the long term concept of a debt economy – an economy where

The first decade of the 21st century is remarkably similar to the period of the 1920s which led to the Great Depression, including an excessive increase in the money supply.

people accept accruing debt as a way of living. This is an economy where people feel they have to borrow money, whether they need it or not, to get a good credit rating so when they really need credit, it is available.

People are beginning to understand that the banks and investment bankers are creating money and that the authority for creation comes from the federal government. The banks are not loaning the money that depositors have placed with them; they loan out about 10 times the amount deposited. The crisis that has arisen is due partially to the fact that certain banks and other institutions, with government permission, began to loan 30 times more than the amount deposited.

The recent Ponzi schemes of loan securitization (a concept that is akin to the old

con game of selling the Brooklyn Bridge to naïve tourists) are simply embellishments of the basic Ponzi scheme of private banks creating credit with permission from the government. This credit creation is paralleled with inflation; that is, issuing huge amounts of credit means large increases in inflation. This worked for a few, those who bought the biggest houses which appreciated rapidly, but now they are exposed as the credit/debt system shows its weaknesses.

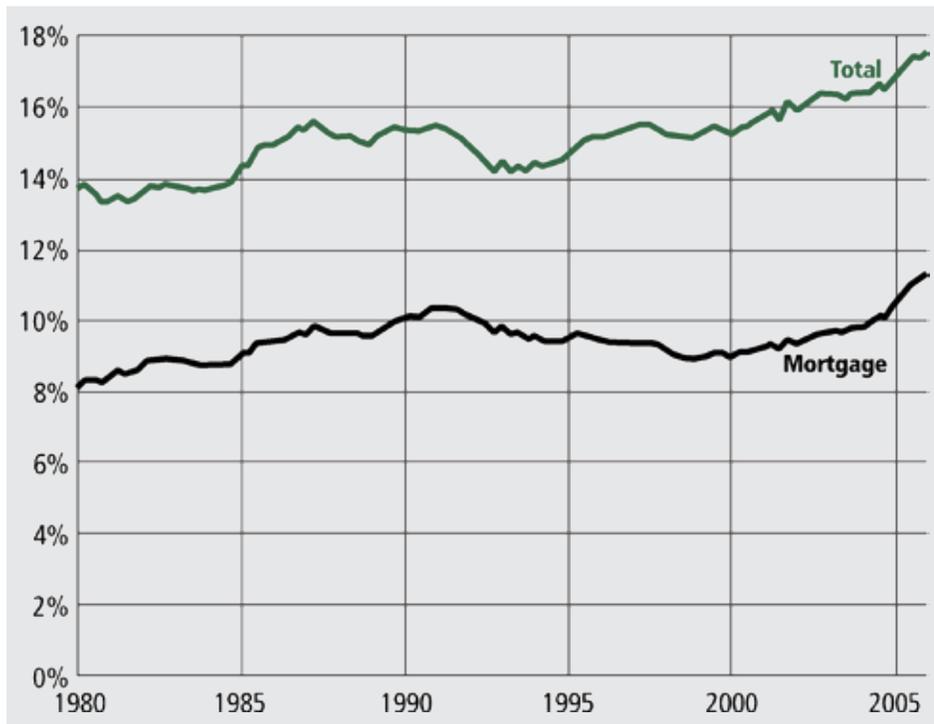
What is the alternative? How would we deal with this in a New Renaissance era? First people would live frugally, realizing that the attempt to make money on speculation is harmful to the community and themselves if they get “over leveraged.” Buying excessive living space as an “investment” would be considered damaging to the community. (“There is enough housing for everyone’s need but not enough for everyone’s greed.”) Second, New Renaissance people would not consider borrowing a virtue but rather a weakness or something to be done only in time of emergency. Third, a New Renaissance person would be very skeptical of the banking system. Local credit unions will be formed to husband the excess capital of the community to be applied to local energy-saving solutions.

The New Renaissance man will be a person who has the skills to do a wide variety of tasks and who can do so without being dependent on a credit system. We can all begin the effort to make that kind of change. Going back to Shakespeare’s comment that “borrowing dulls the edge of husbandry,” we can decide to develop husbandry skills.

The archaic definition of husbandry was “the care of a household.” A more modern definition is “the control or judicious use of resources.” (Husbandry, and its gender counterpart wifery, never included the skill of borrowing money.) These older skills must be relearned to create New Renaissance men and women. ■

Pat Murphy is the Executive Director of Community Solutions and author of *Plan C: Community Survival Strategies for Peak Oil and Climate Change*.

**Figure 4: Homeowner Debt as Percentage of Income –1980-2006**



Beginning in 2000, “irrational exuberance” led to a steep increase in mortgage and total debt as a percentage of annual income.

Source: <http://angrybear.blogspot.com/2006/07/record-household-debt-service.html>

## New Solutions

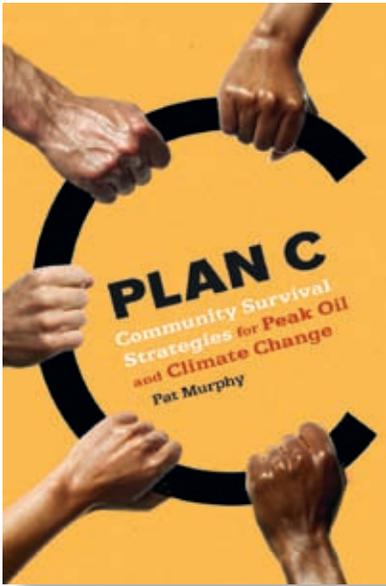
is published by The Arthur Morgan Institute for Community Solutions, a non-profit organization, that has been studying and promoting small local community for more than 60 years.

**To subscribe to *New Solutions*, become a member.** Send your tax-deductible contribution of \$35 (or more) to Community Solutions, P.O. Box 243, Yellow Springs, OH 45387 or visit our website. Your contributions will help us continue this work.

**To receive regular email communications,** send us an email at [info@communitysolution.org](mailto:info@communitysolution.org).

© 2009 The Arthur Morgan Institute for Community Solutions. All rights reserved.

# Special Membership Offer



You can become a Community Solutions member and receive a copy of Pat Murphy's new book, *Plan C – Community Survival Strategies for Peak Oil and Climate Change*, for a combined cost of just \$50 (a savings of \$5). In addition, as a member, you'll receive *New Solutions* to keep you up to date on what we're doing and to help you make informed decisions about how best to adapt to a low energy life.

**Please send me a copy of *Plan C* and enter me on your membership roll. I authorize/enclose payment of \$50.**

VISA/MC number \_\_\_\_\_ Exp. Date \_\_\_\_\_

Name on card \_\_\_\_\_

Signature \_\_\_\_\_

Daytime phone \_\_\_\_\_

Street address \_\_\_\_\_

City \_\_\_\_\_ State/Province \_\_\_\_\_ Zip/Postal \_\_\_\_\_

Email address \_\_\_\_\_

Send me *New Solutions*  via postal mail  via email

**You may also join Community Solutions via phone at 937-767-2161 or online at [www.communitysolution.org](http://www.communitysolution.org)**



**Community Solutions**<sup>SM</sup>

The Arthur Morgan Institute  
for Community Solutions

P.O. Box 243  
Yellow Springs, Ohio 45387  
T: 937.767.2161  
[www.communitysolution.org](http://www.communitysolution.org)

Return Service Requested

Nonprofit Organization  
U.S. Postage  
PAID  
Permit No. 51  
Yellow Springs, Ohio