

A
Supplement
to

Kentucky Horizons

SCAN HIGHLIGHTS

Trends

Identified from the

LRC Scanning Program

August, 1994—July, 1995

Informational Bulletin No. 196

Legislative Research Commission

Frankfort, Kentucky

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FOREWORD

This publication is part of a continuing effort to provide legislators with information that will assist them in their decisionmaking by taking a broad and long-term look at issues. This publication highlights indicators of where current policies are leading and focuses on trends that could have a significant impact on the Commonwealth.

This publication is based on the work of over 30 LRC staff members, who comprise the LRC issues scanning team. During the process of selecting articles for the monthly *Kentucky Horizons* newsletter, they identify major trends that seem to emerge from individual scans or groups of scans. This publication surveys their work from August, 1994, through July, 1995, identifying major trends.

This publication was prepared by Linda Kubala, Dan Risch, Ginny Wilson, Susan Gilliland, Mark Mitchell, Jim Eddleman, Peggy Hyland, and Rita Ratliff. Charlie Bush edited the report. It was revised on the basis of comments from members of the scanning team, as well as Committee Staff Administrators of the interim joint committees.

This report is not meant to be authoritative or comprehensive. It is meant to be a starting point for further discussion on these issues of long-term significance for the Commonwealth.

Don Cetrulo
Director

The Capitol
Frankfort
December, 1995

INTRODUCTION

In April, 1988, an Issue Development Program was initiated at the Legislative Research Commission. The purpose of the program is to provide legislators with information on the potential long-term impact of various public policies on the Commonwealth and to anticipate issues or trends that are likely to have a significant impact on the state.

As part of the program, an internal "scanning" operation was initiated in August of 1988, to alert legislators to emerging issues that are likely to need attention. Scanning is a technique that has been used in the private sector for some time in strategic planning efforts. Scanning is the process of reading a wide variety of publications on a regular basis over a period of time, in order to identify issues early in their cycles, before they become "front page" problems. Early identification of such matters can provide the legislature time to prepare the Commonwealth to take advantage of opportunities and to ward off problems before they become crises.

Over thirty LRC staff members have agreed to be readers or "scanners." As they go about their normal reading, they flag articles that appear to indicate a new idea, an emerging issue, a shift in trends, a technological advance, or a novel approach to a problem. They complete a brief form that requires a summary of the relevant parts of the article and a short analysis of what the implications are for Kentucky. Generally, 12 to 20 "scans" are generated monthly. Once a month scanners meet to review these scans and to select those that appear to have the most significance for Kentucky and to relate to issues the General Assembly is likely to face. The scans that best represent the priority trends and issues are summarized in a monthly newsletter, called *Kentucky Horizons*, that goes to about 1,200 persons and organizations, including legislators, executive agencies, universities and colleges, business and civic groups, and the press.

The following report takes the priority trends and issues identified in the various scanning meetings held from August, 1994, through July, 1995, and consolidates them into trends that are either occurring in the state or are likely to have a significant impact on the state. The trends are not distinct. They interrelate and in some cases overlap. But, in general, the major trends identified and discussed during the seventh year of operation of the scanning program are presented here. Background under each trend is derived from information contained in the individual scan (article) relating to this major trend. The implications presented are not meant to be exhaustive, but only a starting point to generate further discussion of what these trends mean for the Commonwealth and what policy options might be pursued to address, enhance, or mitigate these trends.

The trends are not listed in any order of priority. A table in the front of the publication lists trends under appropriate legislative committees. Also, the legislative committee or committees with jurisdiction are listed in the upper right-hand corner of the page on which each individual trend is discussed.

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attendance, and the ability to circumvent state and federal gambling law is growing.

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TREND: Providing for basic living needs of citizens is of growing concern.

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TREND: Tax preferences for nonprofits are being questioned.

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TREND: The pace and scope of societal change are increasing in the U.S., which makes the issues facing governments more complex and less amenable to static government policies.

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External Costs of Driving

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DEALING WITH AN INFORMATION GLUT

TREND: Society is adapting to an overabundance of information, sometimes with worrisome results.

BACKGROUND: Ours has been called the Information Age. Indeed, recent decades have seen the rapid expansion of scientific knowledge, the nearly instantaneous transmission of data or pictures around the world, and a dramatic increase in people's access to mountains of material. With computer networks, a small-town library user can access the Library of Congress and much more. The Internet is widely used, and 500-channel TV is said to be just around the corner.

While these developments can be exhilarating, a surfeit of poorly understood, inconsistent, and unfiltered information can produce confusion rather than enlightenment. According to some, the once-high reputation of the truthfulness of science and scientists has been damaged because different sides of a political or social issue select only the information that suits their purpose. In a 1994 poll of medical researchers and natural scientists, respondents overwhelmingly expressed the belief that scientific research is misused and misunderstood on public policy issues such as pesticides and second-hand smoke. The Advancement of Sound Science Coalition, the group which sponsored that survey, is working to institute stronger guidelines for the use of science in public policy decisions. The courts also are receiving some guidance in evaluating technical materials. A research arm of the federal court system recently released a 600-page scientific primer for judges to help them handle the proliferation of expert witnesses and technical arguments in today's court cases. The primer covers issues of DNA testing, epidemiology, toxicology, statistics, surveys, and economic damages, explains areas where expert witnesses tend to disagree, and provides advice on how to narrow issues.

Finding the "truth" and discarding inaccurate information also is of great importance in the legislative process. A recent article in the *Kentucky Roll Call* notes that lobbying now relies much less on social connections, and more on education. Top law firms across the country have teamed up to create the State Capital Law Firm Group, a network which provides centralized access to information about activities in the various states.

Several recent books have criticized the news media for inundating the public with irrelevant "infotainment" while failing to provide context or relevance which actually could inform viewers. According to Paul Weaver, in *News and the Culture of Lying: How Journalism Really Works*, journalists almost always report news as a series of dramas or crises. One consequence is that both they and the public become blind to systemic issues. According to Weaver, the savings-and-loan debacle of the 1980s became so large and costly because the press was unable to focus on it until it became a crisis. Other criticisms of the media include the plethora of surveys and one-sided "scientific information" uncritically reported by the media. Surveys are said to basically manufacture news, not provide information.

Clifford Stoll's book, *Silicon Snake Oil*, is a warning against the uncritical belief that computers and networks will by themselves improve society or cure social problems. According to Stoll, "Data isn't information any more than fifty tons of cement is a skyscraper." Without context, without verification, the "factoids" are useless.

All of this points to a situation in which information appears boundless, yet is unable to illuminate fact, let alone truth. There are signs that the public's trust in all institutions and all information is being eroded by the prevalence of conflicting and self-serving information. The 1994 election made it obvious that the voting public is angry with elected officials, yet voter survey results published in the *Washington Post* also showed them shockingly uninformed. Few knew the positions of their candidates on issues they said were

of vital concern to them. They may no longer believe these positions are of any consequence. The prime importance of advertising over candidate positions or party loyalty is thought to be one reason an increasing number of wealthy candidates, able to finance their own campaigns, are winning office.

IMPLICATIONS:

- New approaches are needed to create an informed electorate. Pressure remains for interested citizens to find credible ways to maintain an informed discussion of issues.
- One proposed solution to citizen gullibility is that schools should teach all students the basics of statistics and how to tell whether numbers are believable. Students also could be taught to identify the most common propaganda tools.
- Maybe people need to realize that reading the average newspaper or watching the nightly network news will not keep them informed in any deeper sense. That requires personal effort.
- Lay people have long assumed scientists to be non-partisan, honest, and above bias, let alone fraud. This attitude is changing, and non-scientists will likely seek new methods of scrutinizing and evaluating information provided by the scientific community.
- A variety of new institutions probably will arise to reconcile conflicting material and to provide credible and trustworthy information. Previously, most of us got most of our information only after someone else had sorted, evaluated and prioritized it. Today, much of the glut is coming to us raw, making it pretty useless for everyday decision making. Legislative staff may need to perform more of this information filtering for the legislature.

**INFORMATION TECHNOLOGIES:
REGULATING NEW ENVIRONMENTS**

TREND: **Developments in information technologies require regulatory reform to foster and protect competition, ensure access, and protect privacy rights of individuals.**

BACKGROUND: The telecommunications bill in Congress is expected to open more of the huge telecommunications market to competition. Regardless of the specifics finally approved, however, states will continue as major actors in determining the pace and scope of deregulation. The task includes breaking down technical barriers which can keep competitors out of previously controlled markets, while at the same time ensuring that competition does not benefit only the most lucrative business customers. The more competitive environment is forcing companies and regulators alike to dismantle traditional cross-subsidies between local and long-distance, business and residential, urban and rural service. Since this implies higher basic residential rates, states are facing the difficult task of keeping basic service affordable. According to Census figures, 5 percent of Americans, and 10 percent of Kentucky households, did not have a telephone in 1990, and higher rates could increase these numbers.

New uses continue to be developed for the powerful combination of computers and telecommunication. Interactive shopping is underway in certain test locations, where consumers can view various catalog products on demand, and order them through their computers. Some supermarkets offer computer shopping. The Internal Revenue Service (IRS) reports ambitious plans to expand its data bases on individuals as part of a multi-year computer and software upgrade. Ultimately, according to one IRS official, the agency could obtain enough information to prepare most tax returns itself.

The tremendous amount of personal data maintained in computer files by business and government, however, poses a potential for misuse. The *1994 Equifax-Harris 1994 Consumer Privacy Report* showed record levels of public distrust of institutions and corresponding levels of concern over threats to privacy. Survey responses, however, showed that the public would be more willing to accept new information-gathering schemes if the programs included safeguards on the accuracy and use of personal information. Business and government alike may have to accept a system of strict enforcement of privacy rules if new high-technology information programs are to generate public support.

The commercial use of computer networks still is in its infancy, but the real and potential problems of cyberspace fraud have caught the wary interest of regulators. The Federal Trade Commission (FTC) has held informal hearings to find out what problems exist in the world of cybermarketing, especially regarding consumer privacy and security. That agency also has taken legal action against at least one advertiser on-line. Some consumer advocates want the government to play a more active role as this new medium develops.

Banking is an area that has undergone significant changes with the electronic information age. A new wave of bank consolidations will follow the mergers of the last several years, spurred by interstate banking legislation passed by Congress, says the *Kiplinger Washington Letter*. By the year 2000, it said, there will be only 300 bank holding companies, compared to 6,000 now. About 10 megabanks will rule most bank transactions and do up to 80 percent of bank business, compared with 25 percent now. But the megabanks will face more competition from other providers of financial services, such as Merrill Lynch, GE Capital, and Charles Schwab, and "virtual banks" on the internet. How state laws will apply to these "virtual banks" is under question. Kiplinger predicts a major battle for deposits, asset management fees, and commercial loans.

IMPLICATIONS:

- Electronic advertising may not be amenable to state control, since regulations may not apply in another jurisdiction, where information is up- or downloaded. The same problem could limit national control of electronic networks as well.
- With the growing utilization of computers in private and public life and business, safeguards to protect individual privacy may need to be reconsidered. This should be done in the early stages of the system's development.
- Extreme care should be taken to protect sensitive state government files from unauthorized access.
- The IRS plans to expand its individual databases raise questions about the powers of government. Should government be subject to the same disclosure and accuracy requirements as private business?
- The next few years could see further curtailment of public data availability, due to privacy concerns. Governments recently quit providing on request the names and addresses of owners of licensed vehicles.
- Legislation may be proposed to limit the practice of amassing personal data from credit card purchases, and trading this data between companies.
- When developing its information highway, Kentucky needs to keep in mind that a significant portion of households do not have phones. Schools need to keep this in mind, too, when they implement new technologies to connect homes and schools. They might inadvertently be creating an additional disadvantage for some students.
- Kentucky needs to assure that the much touted competition for local telephone service, when it comes, is not confined solely to the business district and office complexes of Lexington, Louisville and Northern Kentucky.
- Electronic shopping will make it difficult for Kentucky to collect sales and use tax on those purchases, unless sales records can be made available.
- Careful attention to the quality and quantity of Kentucky banking services will be needed. (Kiplinger, however, predicts that many small banks will prosper, serving niche markets.) Medium-sized banks are expected to have the roughest times.
- The impact of electronic banking may require additional regulation to protect the public.

POPULATION TRENDS

TREND: Americans are moving less often than in the past, and rural areas are growing. Continued rapid growth of the U.S. population could impact the nation's resources and living standards.

BACKGROUND: Throughout most of this century, people have moved out of rural areas into cities. Today, more than 75 percent of Americans live in the nation's 837 metropolitan counties, comprising just 19 percent of the nation's land area. During the 1980s, metropolitan counties as a group grew almost four times as fast as those without a large city hub. Since 1990, however, the non-metropolitan counties have been growing much faster than before. Demographers Kenneth Johnson and Calvin Beale believe that this growth spurt is rooted in economic changes that favor rural areas and smaller towns, along with the strong conviction of many Americans that small-town life is better than big-city life.

While Census data show that 74 percent of non-metropolitan counties grew since 1990, growth has not been at all uniform. Counties characterized as retirement or recreation areas grew most strongly. Among the slowest-growing counties were those dependent on farming or mining.

In another trend of note, Americans seem to be moving less often than they did during the 1950s and 1960s, when one in five changed residence each year. The rate fell to one in six by the early 1980s, and has continued a slow decline since then, with only 2.6 percent moving between states in 1994. This suggests that the great postwar population shifts that reshaped the country's political, social and economic landscape may have ended.

The United States has one of the highest population growth rates among developed countries. At the present growth rate of 1.1 percent per year, the U.S. population will double in the next 60 years, and reach 1 billion by 2100, a population similar to that of China. A study recently released from Cornell University, *Food, Land, Population, and the U.S. Economy*, predicts that limited water supplies will force shifts in agriculture and population. If present trends continue, the study predicts the U.S. will likely cease to be a food exporter by the year 2025. By 2050, only half as much cropland will be available per capita as is now required to maintain current U.S. dietary standards.

Another negative aspect of population growth in the United States is increasing congestion. One author notes that cars are multiplying twice as fast as people, and gridlock is becoming a way of life in many parts of the country.

IMPLICATIONS:

- Does the growing population mean the inevitable loss of individual freedom?
- Gridlock is becoming common in metropolitan areas, including some in Kentucky. Do we already have too many people?
- The trend of people moving out of big cities into rural areas might relieve congestion in big cities, but at the expense of farming and open space.
- Kentucky is predominately non-metropolitan, and higher growth rates are likely to be seen in many parts of the state. The population gains mentioned, however, probably won't affect Kentucky's poorest counties, unless they are tourist magnets. The poor rural counties which have experienced the greatest

poverty and decline also depend heavily on mining, farming, and transfer payments, which the study showed were not associated with solid rural growth.

- If the population is less mobile, will this mean communities will become more stable, that people will put down roots and feel a part of a place, taking a more active part in its affairs?

A NEW LEISURE?

Trend: Some experts think we are heading towards a world where most workers are surplus, and where society's goods and services are produced by a fraction of today's labor force. Employment may no longer be a sufficient mechanism to distribute the economic benefits of productivity gains to the population. Communities, nonprofits and governments may play new roles in this regard.

BACKGROUND: Workers in traditional industries have been displaced by wave after wave of automation since the beginning of the industrial revolution. After a period of dislocations, however, the more productive economy always has resulted in a larger workforce paid generally higher wages, as the new machines increase labor's productivity, and the subsequently cheaper products find new markets. There are signs, however, that the massive employment shifts in the United States today are different, and may leave a large part of the population unemployed or unable to earn a living wage. Two respected economists foresee a time when structures other than private industry and national governments, working through employment and transfer programs, respectively, will have to play greater roles in maintaining an equitable distribution of the benefits of harnessing new technologies.

The United States economy has created jobs at a rapid pace throughout the 1980s and 1990s, but jobs which were created, on the whole, have been of lower quality, with less pay and fewer benefits, than the jobs which have been lost. It can be argued that these jobs are expanding not because of higher productivity, but because labor in these marginal jobs is cheap compared to automation. The gap between rich and poor Americans also has widened considerably since 1980. A 1995 Labor Department study found strong growth of jobs at both the top and bottom pay quartiles, at the expense of the middle.

While many service sector jobs have resisted automation in the past, many of these workers are now vulnerable to replacement by computers, smart devices, and communication technology. Whole classes of jobs, both high and low-skill, jobs such as bank teller, pump operator, engineer, financial analyst, telephone operator, and teacher, now are at risk. While low-skilled workers bore the brunt of job losses in the 1980's, higher-paid technical jobs appear more vulnerable now because eliminating them offers greater savings. Scores of credit officers can be replaced with a software program that processes loans, and highly-educated programmers, engineers or technicians in developing countries work for a fraction of wages required in the U.S.

According to a recent Labor Department analysis, compensation for American workers overall appears to have stagnated during recent years, even as their efficiency and output have increased. Indeed, this study shows not just a widening gap between high-paid and low-paid workers, but an erosion of paychecks relative to dividends and investment gains. The most recent figures from the Labor Department show that, adjusted for inflation, average wages and salaries fell 2.3 percent for the year ending in March, 1995, while productivity rose 2.1 percent over the same period.

Not surprisingly, a lively debate is underway. Experts do not agree on where these trends lead, nor on solutions to the difficulties they predict. In the 1994 book *Jobs for All: A Plan for the Revitalization of America*, authors Collins, Ginsberg, and Goldberg propose government programs to eliminate high unemployment. Strategies include reducing the work week, increasing the minimum wage, and passing new legislation to protect contingent workers. Peter Drucker, in "The Age of Social Transformation," foresees knowledge as the critical resource of the future, and bitter competition between nations competing on the basis of their science, innovation, and skills. He foresees that the global nature of production and especially of information will greatly weaken the power of nation states to protect their own citizens with social welfare programs, financed by taxing workers or companies. He posits the rise of a new social sector,

comprising the nonprofit, civic and charitable organizations of today's society, which somehow will have to move in to provide the social structure for the new community.

Jeremy Rifkin, in "The End of Work: The Decline of the Global Market Force and the Dawn of the Post Market Era," foresees a time when a relatively small work force will produce all the goods and services demanded by society, and explores how this vast transformation can benefit the majority of people. He argues that the current trend to eliminate workers with no thought to the health of the greater society will not continue, for three main reasons:

1. Business cannot keep producing if no one can buy the output. Business looking only to its own bottom line is eliminating the jobs of its customers;
2. By eliminating employees, business also is eliminating its biggest source of investment capital. Currently, pension funds comprise 30 percent of the stock market and 40 percent of the bond market, and 75 percent of individual savings, which will shrink if few people have income; and
3. A market can't function in a destabilized society. If most people are free falling, their labor rendered useless, they will have no stake in the system, and a criminal class will grow.

For these reasons, Rifkin expects some substitute mechanisms to develop to spread income among the population. Partial solutions suggested by Rifkin include movement to a 30-hour workweek, with 40 hours pay; tax credits for businesses to share profits with workers; revitalized community organizations to shelter people from the ravages of transitional corporations and the decline in government services; and improved compensation for community work, like child care, elder care, homeless shelters, environmental protection, and similar work, which today are done for little or no pay.

IMPLICATIONS:

- The jobless society may be a long way off, but the shrinkage in middle or lower incomes has been a fact of life for more than two decades. The time to give up on job development has not arrived, and may never arrive, but the time to stop thinking in terms of yesterday's economy may already be here.
- Initiatives to create full employment by spreading existing work around, if successful, could reduce the need for some social services, and reduce some of the stress of chronic overtime.
- Analysts have come to stress education and training as the only hope for displaced workers. Yet if Rifkin's view is correct, and the total demand for workers shrinks, education will not ensure employment in the long run. Even in the short run, emphasis on training conflicts with Labor Department findings that nearly half of new jobs are low-wage and low-skill.
- Our economy uses employment as the prime mechanism for income distribution, i.e., for spreading the benefits of a productive economy among the population. If only a fraction of the labor force is needed to produce the economy's output, then the dependence on employment may need rethinking.
- Society already provides many income sources other than goods-producing work, such as paid retirement, scholarships, and fellowships, a dramatically expanded education system. Finding things to pay people to do would be easy - the problem is capturing part of the "economy's" earnings to fund "society."

CHANGING NATURE OF THE FEDERAL GOVERNMENT

TREND: As the U.S. experiences rapid social change, there is a growing sense that the federal government may be imposing costs greater than it delivers in benefits. This is generating efforts to change the nature of the federal government.

BACKGROUND: One of the major statistics which has fueled the quest for changes in the operation of the federal government is that "every baby born in this country begins its life saddled with \$17,000 of federal government debts." In fact, it is true that, after adjusting for inflation, per capita gross federal debt increased from \$7,000 in 1980 to \$17,000 in 1993. Some think this overstates the seriousness of the situation by not taking into account the degree to which the government's debt is offset by the government's assets. If total government assets are balanced against gross government debt, then the 1993 per capita net debt is \$1,000. In 1980 there was a net per capita surplus of \$5,500, so even the net calculation shows a significant decline. Todd Schafer, in an Economic Policy Institute briefing paper, notes that the decline of assets relative to debt was driven not only by the huge increase in gross federal debt during the 1980's, but also by a substantial reduction in investment in government assets over the same period. Thus, the major change was that government borrowing increased considerably and that the proceeds of that borrowing were used to fund operating expenses rather than being invested in long-term government assets.

There is widespread public dissatisfaction with the ability of the federal government to solve persistent problems and fear that it is consuming an excessive share of current and future private resources for little real long-term gain. These concerns have been growing over time and several attempts have already been undertaken to address voters' concerns. These attempts take two broad approaches. The first approach is to reform and streamline the federal government so that it provides more efficient and more responsive service. The second approach is to externally limit the scope of federal government authority.

The most visible example of the first approach is Vice President Al Gore's National Performance Review (also known as "Reinventing Government"). The effort is organized around the four general principles of cutting red tape, putting customers first, empowering employees to get results, and cutting back to basics. The major projects include an effort to encourage commonsense government, the establishment of 135 National Performance Review labs, to act as prototypes for innovation, a department and agency restructuring drive, a federalism initiative, a regulatory reinvention initiative, and a privatization initiative. According to a speech by President Clinton, one effect of these efforts has been a reduction of 163,000 in the number of federal employees.

In its most recent evaluation of the National Performance Review (NPR), the General Accounting Office (GAO) concluded that 95 percent of the NPR's recommendations had been acted upon, but most had not been fully implemented. The GAO indicated that it agreed with most of the recommendations, but noted that even full implementation will not solve all of the federal government's problems, because many important areas -- such as the lack of effective controls over Department of Defense disbursements, weak internal control procedures and inadequate managerial information systems within the Food and Drug Administration, and shortfalls in the Federal Aviation Administration's airline inspection program — were not addressed.

The GAO report also noted that the NPR is only one of several recent attempts to reform federal government operations. Congress has also been active in the effort, by mandating procurement reform and federal workforce restructuring. The Government Management Reform Act of 1994 extended the coverage of the Chief Financial Officers Act so that, for the first time, most federal agencies will be required to provide annual audited financial statements. These initiatives are geared to making sure that federal

agencies maintain operations data that will allow Congress to evaluate their management. According to GAO, the most important piece of reform legislation was the Government Performance and Results Act of 1993. The Act requires federal agencies to develop strategic plans by FY 1998, to prepare annual plans that set performance goals and to report annually on actual performance toward achieving those goals. By emphasizing long-term planning and program evaluation by outcomes rather than inputs, GAO believes, the Act offers the greatest chance for true reform of the federal government bureaucracy.

Another approach to reforming the federal government which is receiving much attention involves attempts to legally restrict the ability of the federal government to fund its operations with borrowing and to reduce its power to unilaterally impose costs on lower levels of government. Although the Balanced Budget Amendment, which would make federal deficit financing unconstitutional, is not expected to be put to the states in the near future, it is clear that the effort to move toward a balanced federal budget will continue to be a major political issue in the development of each annual budget for some time to come. It is also clear that efforts to balance the federal budget without raising taxes will reduce the amount of federal funds available to state and local governments in the future, as compared with what would have been available without the changes.

Most analysts believe that one way the federal government will respond to these pressures will be through the transfer of significant responsibilities to state and local governments. Some states are seeking additional responsibilities from the federal government. South Dakota has asked the federal Interior Department to allow it to manage four national parks located in the state, including Mount Rushmore. Under the proposal, the federal government would continue to own and fund the parks, but the state would undertake management of all operations. South Dakota officials suggest that they could deliver a 20 percent reduction in operating costs. The state's interest was prompted by discussion in Congress of significant budget cuts to the National Park Service.

Like South Dakota, most states are eager to gain more flexibility in managing federal programs if federal funds stay in place. However, there is great concern that the federal government will choose to continue or impose federal requirements on state and local governments *without* supplying funds. Concern about the imposition of both old and new unfunded federal mandates on lower levels of government resulted in adoption of the federal Unfunded Mandates Law. The law places some restrictions on the ability of the federal government to impose costly requirements on other governments, unless it also provides the funding to meet those requirements. The restriction applies to mandates with total costs in excess of \$50 million. Any unfunded mandate which is judged by the Congressional Budget Office to exceed that amount automatically triggers a point of order in either chamber. The unfunded mandate can only be imposed if a majority of members vote to override the point of order. Thus, large unfunded mandates can now only be imposed by a specific vote of Congress. However, this law does not prevent the federal government from withdrawing its funds from support of its existing programs, including intergovernmental aid.

IMPLICATIONS:

- Efforts to both reform and constrain the federal government are likely to be a recurring feature of the political landscape for some time to come. Because the actions of the federal government have such a large effect on state and local governments, as well as on individual citizens, there is likely to be much greater uncertainty regarding the demands for services which state and local governments will face and the resources they will have available for meeting those demands.
- If there is a continuation of the trend toward reduced federal investment in infrastructure, states with declining infrastructure may find it difficult to replace what they are losing. Studies repeatedly support the conclusion that adequate physical infrastructure is a necessary component of continuing economic growth.

- Legal restrictions on the ability of the federal government to engage in deficit financing will curtail its ability to inject dollars into the economy during a recession. This could mean that the economic and fiscal effect of recessions on the states will be greater. Those who favor restrictions on deficit finance argue that lowering the deficit will significantly lower interest rates, which will make the economy much stronger. Even if it is true that the economy might grow much larger and much faster with lower interest rates, it is unlikely that recessions will disappear.
- If the federal government does devolve more responsibilities to state and local governments, those governments should gain much greater flexibility to tailor services to the characteristics of their local situations, without being fettered by national regulations that may have made sense in some locations but not in others. It is possible that such flexibility will allow state and local governments to deliver better and more efficient service. However, it is also possible that the responsibility for designing programs may exceed the resources of smaller governments.
- While increased flexibility may allow state and local governments to tailor programs to the needs of local areas, by allowing more local control it is likely that there will develop greater disparity in the levels of services and taxes in communities across the nation. Regions which, in the past, have been net importers of federal dollars (such as Kentucky) may find it even more difficult to keep up with other regions with historically stronger economies.

FINDING ALTERNATIVES TO UNRESPONSIVE SOCIAL INSTITUTIONS

TREND: **Collectively or singly, people look for ways to address needs which no longer are adequately met by social institutions.**

BACKGROUND: The people in the neighborhood of Five Oaks, in Dayton, Ohio, chose to physically reshape their urban landscape, in the hope of forestalling neighborhood deterioration and increasing crime. The effort offers long-term success, where a massive police presence promised only a short-term solution and the old layout of the neighborhood not only failed to provide any sense of security, it actually encouraged problems.

Gerry Singesen, coordinator for the Program on the Legal Profession at Harvard Law School, says that Americans have undergone a fundamental attitude change over the last 20 years and are now more inclined to assert their own rights under the law. This has taken the form of a sharp increase in people representing themselves in legal proceedings and choosing not to hire a lawyer for non-court legal matters.

The pervasiveness of violence in television entertainment has parents searching for ways to block children's viewing of violence without a complete ban on TV watching. One approach involves a computer chip referred to as the V-chip. The violence-chip would be installed in a TV and would read a TV program signal indicating a violence-rated content. A parent could then program the TV to block programs with a high violence content.

IMPLICATIONS:

- People don't trust lawyers, don't believe the police can protect them, and feel trapped by a near monopolistic industry that seems intent on emphasizing violence as entertainment. These are only a few examples of social institutions that the public tolerates but seems to have lost faith in.
- Perhaps the major implication of this phenomenon is that ultimately people will act to fill the needs left unmet by an ineffectual or unresponsive institution. For instance, if public schools fail to educate, home schools or private schools will increase in number. If police can't protect a neighborhood, individuals may arm themselves or form citizen cadres. All of this reveals a public that is far from apathetic about their government, their social connections, and their communities. It reveals that people do care about what goes on around them and will try to find solutions to problems.
- On a more practical scale, one can expect that the legal profession will resist incursions into the practice of law, while consumers will push for the freedom to do their own legal work or to de-legalize aspects of their lives. Legislation to issue licenses to private citizens to carry concealed deadly weapons has been prefiled for the 1996 Kentucky General Assembly and is already in effect in some states. The call to form new political parties is another offshoot of this attitude that the existing political parties and leaders are not getting the job done.
- Finally, as power shifts from Washington to the states, one may very well expect that there will be an upsurge in public involvement in decision making.

USE OF MARKET STRATEGIES TO REDUCE LOCAL ENVIRONMENTAL DAMAGE

TREND: Various market-type strategies and incentives are being considered at the state and local level to foster reductions in environmental damage from regional economic activities.

BACKGROUND: Amid growing political and economic pressure to remove or replace government environmental regulations, some proposals are being developed which rely on market strategies to reduce environmental damage. Critics of existing environmental regulations argue that they often impose excessive requirements to achieve small benefits. Market-type approaches represent attempts to improve the efficiency and effectiveness of environmental programs by designing them to reward desired behavior. Such efforts are well underway in the regulation of national air and water quality standards, and there are innovative efforts which are more specific to regional industries.

The Research Triangle Institute, working with EPA funding, is attempting to do a feasibility study for the nation's first "eco-industrial park." The goal of the study is to determine whether a park in which plants are matched so that wastes from one can be used as inputs by another could generate significant environmental and economic benefits.

An industry-specific proposal targeted to the farm sector could also affect local environmental conditions. The proposal is to redirect federal farm subsidies of \$15 billion per year from crop production programs to subsidies for environmentally friendly farming practices. According to proponents of the change, agriculture is the leading source of ground and surface water pollution and has accelerated destruction of wetlands. Regulation of farming practices is difficult because practices vary with climate, soil quality, type of crop and landscape; pinpointing sources of pollution runoff is difficult; regulations could disrupt land value and property rights; and regulation could further reduce the number of family farms. Under the proposal, "green payments" could be in the form of direct cash payments or credits against income or property taxes. Other market forces have already had an effect on one environmental consequence of farming. According to the Worldwatch Institute, which regularly publishes statistics about environmental quality, soil erosion from farming has been reduced by two thirds since 1985. This change is largely the result of farmers' greater use of no-till cultivation practices and the fact that the number of acres in production has fallen since 1990, in response to a more market-type emphasis in subsidy programs.

Another type of market solution has been used by local and regional land trusts. Land trusts are nonprofit groups that purchase land outright, or negotiate agreements, generally to preserve wildlife habitat and open space. According to the Land Trust Alliance, the number of such trust agreements increased by 23 percent in the past four years. Overall, nearly 1100 land trusts have helped preserve more than four million acres, either through direct purchase or through making conservation agreements with property owners. Another frequent use of trusts has been to protect working farms and ranches from urban development pressures. One advantage of the use of land trusts for local governments in the areas where the land is purchased is that, since the land is owned by a private entity, it is still subject to property taxes. Some land trusts are attempting to forge public-private partnerships. Under a proposal led by the Kansas congressional delegation, land owned by the private nonprofit National Park Trust would become the Tallgrass Prairie National Preserve and would be managed by the National Park Service. The deal has not yet been approved, but stands as an example of an arrangement that may become more common in the future.

IMPLICATIONS:

- The link between particular production practices and general environmental quality is not always easy to determine. Identifying the interactions among incentives for all participants among various programs may also be difficult. While locally designed environmental policies have the potential to be more efficient and effective in fostering economic growth without undue degradation of the local environment, they also carry a risk that they could do more harm than good. It is possible that state and local officials may not have adequate access to the level of technical expertise necessary to create programs that yield the desired improvements.
- Kentucky has had a law since 1980 (KRS 224.46-590) to examine the feasibility of a hazardous waste treatment industrial park complex for the promotion of economic development and sound waste management. Perhaps it is an idea whose time has come.
- The win-win opportunities provided by conservation easements may make them an increasingly attractive preservation tool.

A CHANGING MINDSET

TREND: A government report, business and consumer statistics, as well as the innovative use of technology, signal a reevaluation of the societal mindset that resources are unlimited and that ease of use and disposal take precedence over conservation and reuse.

BACKGROUND: The U.S. EPA, which has tracked solid waste generation and disposal statistics since 1980, has determined that per capita waste generation has halted its steady rise. EPA now projects that by the year 2000 the amount of waste produced each year will decline. In other areas of daily life the trend may also be seen. The average age of automobiles is now 8 years, up from the 5-year average of 25 years ago. Many communities are seeking ways to return environmentally contaminated real properties to productive use. Also, the entrepreneurial quest to develop and market renewable energy sources continues, despite obstacles. For example, another major advance has been made in thin-film solar technology.

IMPLICATIONS:

- Continuing to drive older model cars reflects an unwillingness or inability of consumers to bear the financial strain of automobile purchases while facing significant competing demands for their money. Manufacturers may also be building cars that last longer. Whatever the reasons, the end result is that consumers are using cars, and presumably other manufactured goods, longer. In an economy designed to function best when consumption is strong, this could be expected to signal a slow growth economy, a flattening of the "boom-and-bust" hiring pattern, and perhaps a shift to earning profits based on quality instead of volume.
- Manufacturers might be expected to be more cautious in investing in new facilities, but more willing to upgrade existing plants.
- Plastics and newsprint recycling markets are strong, indicating both good supplies of materials and the increasing investment in utilizing the materials. Other recycled-material markets are stable. Consequently all indications are that the public and the business community are committed to reusing material that years ago was unthinkingly discarded. These market conditions financially reinforce the recycling programs started in most Kentucky communities. But if the markets for recycled materials soften, local governments will feel new pressure to return to or to increase subsidies for recycling programs.
- More and more uses might be found for recycled material, creating new business opportunities and greater competitive pressures on virgin materials.
- In more general terms, a change to an attitude of conserving and reusing resources might lead to greater challenges to real estate developers and business and government leaders who define progress as new buildings and more highways.

CONSENSUS GOVERNING

TREND: **Bureaucrats, business leaders, and university researchers explore agreements on how government should govern in environmental arenas.**

BACKGROUND: The U.S. EPA and the University of Cincinnati set up a study on using microorganisms to break down oil in contaminated soil. Ultimately, the results of the study will be made available to industry. The U.S. Department of Energy entered into a 3-year study with industry representatives. By pooling government money and industry expertise, new thin-film solar technology has been developed that can supply all necessary daytime electric power for a home at half the cost. After 3 years of negotiations between the Association of Home Appliance Manufacturers, the Natural Resources Defense Council, the American Council for an Energy Efficient Economy, and others, new efficiency standards will be incorporated into 1998 refrigerators and freezers. The energy saved compared to 1994 models will range from 22 to 30 percent.

IMPLICATIONS:

- Whether the government agency is the U.S. EPA, trying to find more effective methods for required cleanups of contaminated soils, or the U.S. Department of Energy, attempting to keep alternative energy research viable as a matter of public policy, agencies can stretch their resources to meet challenging public needs by working with, rather than against, the regulated community.
- Government regulators more and more often voluntarily acknowledge or are forced to admit that they don't have sufficient or accurate data to guide decision making. As government turns to industry and universities for the information, the public might become skeptical and fear biased decisions. This in turn might lead to the public demanding more resources for regulators or renewing calls for smaller government.
- Agreed to standards might be expected to reduce adversarial tactics during and after the standard setting process. Thus, regulatory agencies may be able to shift resources from legal divisions to other uses. However, it may also be expected that negotiating cooperative agreements will be time-consuming and demand different agency resources.
- If cooperation between the government and private interests is sustained and grows, citizen trust in the government might be expected to increase. Government may well be viewed as responsive and effective.
- The marketing of profitable technology developed from government or university and private partnerships may raise questions of equity. Should the taxpayers receive a part of any profits? Should a university that has participated in the research?
- As consensus building increases in use as a governing tool, the process may be used more by private parties among themselves. Eventually, a need may arise for training opportunities for negotiators and for the establishment of minimum standards of competency.

CREATIVE USE OF TECHNOLOGY

TREND: **The creative use of technology continues to suffuse everyday life in unexpected ways, with implications for Kentucky's farmers and consumers.**

BACKGROUND: Genetically altered sperm offer the promise of eliminating genetic-based diseases and unwanted genetic traits. In-vitro (outside the body) manipulation of embryos may screen for disease-triggering genes.

Microorganisms eat oil-tainted soils. Refrigerators and freezers, after 1998, will be designed to use 22 to 30 percent less energy than 1994 models. And a car manufacturer has pioneered fuel saving technology as simple as shutting off the engine when the accelerator is released.

IMPLICATIONS:

- Worldwatch, an environmental research institute, predicts massive food shortages. However the U.N. Food and Agriculture Organization maintains that growth in food production will keep pace with the world's population growth. Kentucky's commodity crop producers should be expected to take advantage of technology that will increase yield. This may take the form of bringing marginal land into production, which in turn may increase soil erosion and sediment loading of water courses. Greater reliance may be placed on the use of agricultural chemicals, which in turn will raise concerns about drinking water purity.
- Gene manipulation will not be limited to human genes. Kentucky's agricultural community must expect that new farm products will be designed both in crops and in animals. Resistance may be anticipated. However, as Kentucky seeks to maintain a viable agricultural economy, competitive pressures from U.S. agricultural states and the world's agricultural-based countries will force the use of these new products.
- Urban Kentuckians continue to lose their connection to Kentucky's rural traditions. As the state's agricultural community strives to remain competitive through the use of new technology, resistance may be anticipated from the non-farm populace. Animal rights activists, environmentalists, and ethicists all may seek to slow or stop this technology.
- Kentucky's average working farmer is growing older. These older farmers will need help with the new technology. Young and educated farmers will need to be recruited to take the place of retiring farmers. Big farms with the capital to access the new technology may be expected to form and be run by outside business interests. Small farms will struggle and demand more resources from the state.
- Energy efficiencies in major appliances and the continued research into non-petroleum-based fuels for personal transportation, such as solar energy, might be expected to reduce the demand for coal-fired energy from utilities. However, progress into electric battery energy storage could increase demand for utility power. Thus the future for coal remains unclear but tends to look stable.

PERFORMANCE BUDGETING

TREND: Many states have instituted performance budgeting to justify the way they spend money.

BACKGROUND: Many voters across the country no longer trust state legislatures to manage government's purses. In order to appease the electorate, many states have instituted performance budgeting. In this process, legislators are concerned with the results of spending, and how to get the most "bang for their buck."

A performance budget defines specific goals for agencies and other recipients of funds (usually done in combination with strategic planning), sets performance targets, and then measures results. Managers are usually allowed considerable discretion over spending in order to achieve the goals. Unfortunately, it is often easier to define than do. It is very difficult to quantify the goals of some executive agencies, and sometimes this is not the only end to strive towards. Another problem is getting agencies and legislators to agree on targets. Some cooperation between the two is needed, since executive agencies may set goals too low by themselves. Problems also arise when goals are shifted, making it hard to compare results over time. According to an article in *State Legislatures*, legislators must determine penalties for failing to meet goals, and rewards for agencies that exceed them. Penalties range from decreased funding to decreased flexibility in spending. Rewards may include bonuses for staff.

Several states, including Oregon, California, and Texas, have implemented some form of performance budgeting. In a recent edition of *Governing*, Jonathon Walters describes the five-year-old Oregon Benchmarks program, which is an attempt to measure progress in a number of different areas. The state has set 270 goals for itself, ranging from cutting teen pregnancy to improving the state educational system. Twenty of the goals are listed as "core." Another 30 make up an "urgent" list. By tracking the results, the state is able to allocate its resources based on performance. Oregon has experienced great success with its program, including being named one of 10 winners in last year's Innovations in State and Local Government Awards, sponsored by the Ford Foundation and Harvard's Kennedy School of Government.

Kentucky does not have performance budgeting, but agencies and branches of state government are required to give affirmative consideration to the biennial trends report produced by the Kentucky Long-Term Policy Research Center. Agency heads are required to consider the following questions and to attach a report addressing the questions with their agency budget request:

1. Does your agency agree that these trends are all of the major trends affecting the future of the Commonwealth?
2. If so, how are your agency's budget priorities reflecting the importance of these trends?
3. If not, what important trends are not included and how does your budget reflect the importance of these trends?

The 1994 Budget Bill directed the Council on Higher Education to develop a long-range, ongoing performance funding system. The performance funding process was begun as a one-year experiment in 1995-96, and the Council has proposed a performance funding system for Kentucky's public universities and community colleges for the 1996-98 biennium.

IMPLICATIONS:

- State legislatures are increasingly feeling the need to do more with less. Performance budgeting prods them to allocate resources in the most beneficial way.
- States that had the most success in implementing performance budgeting did it quickly and had a strong commitment to the system. Legislators, and particularly agency managers and personnel, must be committed to the attainment of the goals.
- There are some additional costs involved with performance budgeting. Goals must be developed and results must be tracked, ideally on a computer information system.

RECLASSIFICATION OF SMOKERS AND EX-SMOKERS

TREND: Issues surrounding the use of tobacco continue to be debated and may be spreading from the health arena to the insurance arena.

BACKGROUND: Within the insurance industry, there is some sentiment for reclassifying who constitutes a smoker and ex-smoker for premium purposes. Insurance companies (both life and health) charge cigarette smokers higher premiums than persons who have abstained from smoking throughout their lives, persons who have not smoked cigarettes for at least 12 months, and persons who use pipes, cigars, and oral forms of tobacco. This has led to a cigarettes-only pricing. There is a call from some underwriters to reclassify persons as tobacco users or non-tobacco users, including all users of any tobacco products in the tobacco-users group. Additionally, 94 percent of insurance companies define an ex-smoker as a person who has not smoked for 12 months, regardless of how much tobacco was consumed or for how many years the individual smoked. There is a suggestion that this definition should be expanded to require a non-smoking interval of 30 to 60 months before the designation of ex-smoker/non-smoker is given for insurance purposes.

Some in the insurance industry say that to effectively classify risks, tobacco users should be reclassified and charged more.

IMPLICATIONS:

- Concerns about use of tobacco are spreading beyond use of cigarettes.
- This could affect health insurance in spite of the community rating scheme set forth in 1994 HB 250, as insurers have the option of charging more for life-style choices.
- Challenges to tobacco use in any form can have an impact on use of Kentucky's major crop.

INCOME INEQUALITY

TREND: **The entire economy will likely be hurt by growing income inequality. The relationship between education, joblessness, crime, and economic prosperity for all is becoming clearer.**

BACKGROUND: In a new National Bureau of Economic Research study, a Harvard University professor reviews extensive economic literature and concludes:

1. The U.S. developed a large, relatively permanent group of young male offenders in the 1980s and '90s who are not likely to be productive in the workforce;
2. In 1993, 1 of 12 men in the workforce was "under supervision of the criminal justice system," 11 percent of all young men and 36.7 percent of black men ages 18 -24;
3. Higher joblessness is associated with higher crime rates;
4. Growing income inequity and low wages contribute to the propensity of men to commit crime in the 1980s. Between 1973 and 1993, the value of the minimum wage after inflation has fallen about 24 percent; and
5. Young men incarcerated work less in the ensuing years than those who have not gone to prison, because they have a hard time getting jobs.

According to Steven Rattner, in *The Wall Street Journal*, "...income inequality has worsened dramatically over the past 20 years and now stands at its greatest level since records have been kept. Among industrialized countries, America has the greatest division between rich and poor..."

"Since 1967, higher earners have done far better than lower earners. After peaking in 1973, real annual earnings in the bottom 20 percent have dropped by 24 percent, while those in the top 20 percent have increased by 10 percent."

Income inequality along education lines is growing. A high school diploma is no longer an entree to the middle class. The college-educated top quarter of the population fares better than the lower quarter, who are less educated and are stuck in lower paying jobs, with little or no prospect for improvement. A growing number of economists are saying that the income gap is bound to impede economic growth.

Mathematical models developed by Paul Romer, an economist at the University of California at Berkeley, suggests that the entire economy will be worse because of such inequality. He said, "...even the rich can be worse off from inequality". He says that we must now think seriously about something that we didn't believe could happen. In contrast to conventional economic wisdom, which holds that the overall economy is unaffected by the way income is distributed, the country is getting richer while those on the bottom are not. Labor Secretary Robert Reich warns that "a society divided between the haves and the have-nots or between the well-educated and the poorly educated ...cannot be prosperous or stable."

A study of 85 metropolitan areas in the U.S. suggests a strong link between income gap and job growth. Job growth is slowest where the gap is widest and strong where the gap is narrower.

Aaron Berentein, in *Business Week* (August 15, 1995), concludes, "Ever since slavery ended, the U.S. has at least partly lived up to the ideal that everyone should have an equal opportunity to prosper. Now,

heightened inequality is undermining the concept. The U.S. will continue to suffer socially if the trend continues, and it's likely to suffer economically too."

IMPLICATIONS:

- Income inequality is a problem that is going to affect in a fundamental way the lifestyles of all Kentuckians. Those who are better off must concern themselves with the condition of those who are in need. United we stand, divided we fall.
- Income inequality impedes overall economic growth. The public will need to be educated to this fact if they are to support increased government efforts to reduce income inequality.
- Criminal behavior is not a peripheral issue to employment or poverty. Kentucky and the nation may be losing a large proportion of their potentially productive work force. Given the dearth of young people, this may be an especially critical issue.
- The need to assure a good education for young males and to decrease drop- out rates is vital to addressing the joblessness problem.
- Accessibility and availability of postsecondary education will continue to be important to a thriving economy.

HIGH SCHOOL RESTRUCTURING

TREND: **Restructuring of education remains a continuing concern, and more data is becoming available on effective high school restructuring.**

BACKGROUND: A study sponsored by the Center on Organization and Restructuring of Schools at the University of Wisconsin, and conducted by Valerie Lee of the University of Michigan and Julia Smith of the University of Rochester, provides quantitative data to support high school restructuring efforts. The researchers grouped a set of school practices as traditional, moderate, or restructured. They then classified 820 schools attended by a nationally representative sample of more than 11,000 high school students and compared data based on student achievement in math, reading, social studies and science between 8th and 10th grade and student engagement in academic life. The restructured schools "that engage in as few as three of the [12] practices we have classified as 'restructured' show quite powerful effects on students' learning and engagement." Examples of restructured practices include parent volunteers in the school, interdisciplinary teaching teams, mixed-ability classes in mathematics and science, cooperative learning focus, and emphasis on staff solving school problems.

The research suggests that schools might be better served by focusing in a concentrated way on a few reforms over a sustained period of time. The data also supports smaller learning environments and strategies like school-within-a-school. They also found that few high schools were engaged in even minor restructuring efforts and that the American high school remains very bureaucratic.

IMPLICATIONS:

- In July, 1992, the State Board of Education established a Task Force on High School Restructuring to make recommendations to improve the success of high schools. They recommended changing the requirements for graduation and called for establishing pilot model sites to implement its recommendations through 1996. The results from those sites will be used by the State Board as they consider modifying graduation requirements.
- There is some evidence from the state assessment results that high schools are not improving the academic performance of their students as effectively as the elementary and middle schools. These findings may provide encouragement for change and suggest that schools should focus on a few reforms over a sustained period of time.
- The focus of education reform may move to secondary schools.

CHANGES FACING HIGHER EDUCATION

TREND: Higher education will continue to undergo major changes forced by financial and demographic realities.

BACKGROUND: Spending pressures on state budgets are so great that something must give. What gives in most cases is money for state colleges and universities. Between 1990 and 1993, according to Steve Gold, writing in *Governing* magazine, higher education appropriations rose less than one percent annually, a huge decrease when inflation and higher enrollments are considered. The result has been ever-higher tuitions.

Universities also have undergone staffing cuts and tuition hikes, reduced the requirements for some degrees, closed entire departments, and imposed penalties for taking more classes than required for graduation. There is a growing problem known as "time creep" (taking longer and longer to finish college). Fewer than half of students nationwide finish in four years.

However, others propose that changing demographics may help alleviate the problem. Jane Bryant Quinn, syndicated columnist, states, "The number of young people reaching traditional college age is beginning to rise after 15 years of decline. The more students that the colleges have, the less they need to raise their prices.... During the next 15 years...tuitions will run only slightly above the general inflation rate. Family incomes should rise faster than that."

Gary Putka and Sara Lubman, writing in the *Wall Street Journal*, acknowledge the surge of high school graduates nationwide in the next 14 years, but predict it could lead to wholesale denial of admissions.

"The populations that are increasing fastest are those that have been underserved, especially Hispanics and some Asian groups," says Robin Zuniga, an analyst at the Western Commission, a research group. Colleges will become more affordable for those families only when incomes grow faster than tuition. Recent years have seen stagnant, even falling, real incomes for many families.

Higher education will be competing with elementary and secondary education for state dollars. To the surprise of some demographers, the population of children in the U.S. has taken a sharp turn upward. Baby boomers are producing more children later in life than experts predicted. Immigrants, particularly from Mexico and Asia, are continuing to flood into the country; many have large families at young ages. By 2025, the school population will grow from 49 million to 58 million children — an 18 percent hike — according to new figures released by the Educational Research Service. By all estimates, many school districts are unprepared.

IMPLICATIONS:

- Funding of higher education will remain an issue.
- Close attention should be paid to changing demographics, to anticipate changes in school populations and to be ready to meet the needs.
- The need for tuition assistance for low-income families may increase.
- Fundamental change in how universities operate and relate to the entire K-12 education system may be underway.

- Some believe an assessment of higher education governance will be needed.

DOWN AND UPS OF COAL

TREND: **The future of coal continues to look promising, but Kentucky may feel the impact of depleting coal reserves in the next two decades.**

BACKGROUND: Coal will continue to be available in abundant quantities, but short-term coal use in the U.S. is expected to remain level over the next 10 years, forecasts the National Research Council. The report, "Coal Energy for the Future," forecasts a higher demand for coal by 2010, when natural gas and petroleum prices are expected to increase. Higher gas and petroleum prices also could drive growth in renewable energy and nuclear power.

By 2010, NRC forecasts, aging electric plants will have to be replaced and the demand for electricity will increase. At that point, coal-based technologies will return to favor, but ever-stronger environmental emissions regulations for SO₂, NO_x, particulate air pollutants, air toxins from power plants, and solid waste issues could lessen the trend toward coal-fired power plants. The regulation of CO₂ emissions, if adopted, would be a major challenge for the industry.

A small market is anticipated for synthetic gases and liquid fuels from coal in the next 15 years. But synfuels could get a foothold if the prices of competing fuels increase as production costs lessen for synfuels.

Clean coal fuels could also become popular in the marketplace after 2020, as emissions controls become progressively stronger and concern over greenhouse gas increases.

The NRC report noted that the Department of Energy's advanced research budget has declined significantly since 1988, and the reductions for advanced research are not commensurate with the increasing needs for lower cost, more efficient, and more environmentally acceptable use of coal through the next 50 years and beyond. But while coal R&D is declining, DOE plans to fund fuel cell and gas turbine projects. Those two programs are integral components of advanced coal-based power systems. Of the advanced coal-based power generation technologies being funded by DOE, gasification-based power generation systems offer the highest efficiencies for advanced systems, the report said. Work on all the advanced systems should focus on acquiring the cost, emissions control and efficiency information needed to select the most promising systems for further development.

However, Research by the Kentucky Geological Survey and the U.S. Bureau of Mines suggests that Kentucky will start feeling the effects of depleted coal reserves in just a couple of decades. Current production of 154.5 million tons will not be possible in 20 or 30 years. Earlier studies had estimated it would be more than 200 years before Kentucky's coal ran out. The study is part of the first national effort to determine how much time is left for coal.

The president of Coal Operators and Associates Inc. said no one can predict what the future will bring in terms of technological advances and market changes. The president of the Kentucky Coal Association said the amount of coal remaining represents 87 percent of the original resource and that market factors determine how much is mined.

Scientists at the U.S. Bureau of Mines have concluded that, because of economic factors and losses in mining operations, technological restrictions, and prohibitions, only about 5 percent of the coal beneath Kentucky may make it to market.

IMPLICATIONS:

- Kentucky may want to look at additional infrastructure investments in areas of the state dependent on coal, if mining of the resources is going to diminish and other forms of economic development are explored.
- Greater efforts to encourage economic development alternatives to mining in Eastern and Western Kentucky may occur. The Local Government and Economic Development Fund, created in 1992, which returns more coal severance tax revenues to coal counties to develop new industries, was propelled by the need to develop diverse economies for the time when coal mining is no longer a major employer.
- As federal research and development diminishes for clean coal technologies, the state may be asked to contribute more in this area.
- Changes in coal severance tax revenues could affect the state's budget.

ASSISTANCE FOR CHILDREN

TREND: **Various pilot programs are underway to address the continuing plight of children.**

BACKGROUND: Chicago is experimenting with a new concept: boarding school for the poor. They are turning a public housing high-rise into a dormitory for students in grade 4 through 8. Children will be bused to their regular schools and returned each day of the school week to the dorm, where there will be live-in teachers and counselors. The children will go home on weekends, holidays, and for summer vacation. Eventually high school students are to be included in the program, which is sponsored by the housing authority, the school board, and police department.

Kansas City is embarking on a “hugely ambitious attempt” to remedy what the author sees as the central problem for today’s youth: “There aren’t enough caring adults in their lives.” The city has established a mentoring program, YouthFriends, “a collaborative effort of schools, non-profit agencies and community leaders.” Within three years, it hopes to have recruited 30,000 adults to place with children from 5 to 17 years old.

“This idea grew out of Kansas City’s intensive focus on changing the lives of its children” — following the determination in 1992 by its own businesses and charities that the condition of children’s lives there rated a D-plus. Besides the mentoring program, the city’s metro area became a test site for an anti-violence program called “Squash It”, developed by the Harvard School of Public Health. It was in that program that the children’s need “just [for] someone to talk to” became clear.

The Boy Scout district which serves Louisville and 25 surrounding Kentucky and Indiana counties has launched a three-year effort to strengthen existing troops and begin new ones in urban neighborhoods, especially targeting low-income and minority boys. According to Jere Ratcliffe, chief executive of the national Boy Scouts, who spoke at a kick-off luncheon for the initiative, about twice the proportion of suburban boys belong to the scouts as urban boys. Most troops have moved to the suburbs, and the scouts have abandoned urban kids. Scout leaders said they think the Boy Scouts could provide hope and direction for a lot of urban kids who find themselves getting into trouble, the kind of direction a lot of African-American leaders advocate for urban youth.

IMPLICATIONS:

- Kentucky can learn much from pilot efforts to assist children.
- New programs that incur start-up costs can result in savings down the road. Investment may be necessary.
- Attention needs to be paid to the inadvertent incentives and disincentives that can be built into policies and programs.
- The focus on helping children is one that the public often is willing to support.

HEALTH CARE DELIVERY

TREND: Innovative methods for delivering health care to rural areas are underway, and attention to public health concerns is rising.

BACKGROUND: Hospitals in rural areas are shutting down, creating even more health care problems for rural residents. Patients in rural areas tend to be older, require more long-term care, experience more injuries and fatalities due to accidents and occupational causes, tend to have higher infant mortality rates, tend to have less insurance, and are more likely to be unemployed.

Telemedicine is one approach to providing health care delivery in remote areas. It involves clinical medicine assisted by computers, videoconferencing systems, and/or telephones to provide better access to research, transmit medical and non-medical imaging and clinical patient data, and to allow remote consultations. The University of Kentucky has received grants from the Appalachian Regional Commission and the Office of Rural Health Policy to develop a telemedicine network to provide access to the latest and best in medical care to residents of Eastern Kentucky and to improve the center's contact with practitioners there. The University of Kentucky Medical Center is already linked to hospitals in Morehead and Berea, and planning rapid expansion.

Some other efforts across the country to address the health care problems of rural areas are:

1. Four academic health centers in rural states have set up "Health of the Public" initiatives. They are developing model programs to increase access as well as increase the number of practitioners in rural areas. The University of Missouri's Health of the Public program includes increased collaboration among the schools of medicine and nursing and the health services management graduate program.
2. A health center in Syracuse is using a new telecommunications systems called CareNet that will provide upstate New York with access to specialists through remote control. Eventually the center will put technology on wheels to visit remote areas. A number of corporations are involved, such as Apple Computer, Eastman Kodak, Nikon, and Sprint.
3. In Minnesota a consortium of eight rural hospitals, with some federal assistance, is forming the country's first telemedicine networks. (Other systems in the country are part of a state or university network.)

An area of growing concern is the spread of communicable diseases. The outbreak of Ebola in Zaire is frightening, but, in fact, established and curable diseases are doing far more harm, especially among the world's poor, than new ones. What is worse, their strength is growing, not fading. The emergence and resurgence of many diseases is occurring despite wonder drugs.

Germs evolve much more quickly than humans, and they are infinitely persistent. Staphylococcus bacteria, which for centuries made trivial wounds fatal injuries, were defeated by penicillin, but by now strains are resistant to virtually all antibiotics. Tuberculosis is another former killer supposedly wiped out by antibiotics, yet by 1991, almost half of New York's new cases of tuberculosis were resistant to the two main drugs previously used to treat it.

Recent reports indicate that the AIDS virus is carried by one out of every 92 American men from the ages of 27 to 39 years old. The federal Center for Disease Control and Prevention said AIDS in 1993 became the No. 1 killer of people 25 to 44 years old.

IMPLICATIONS:

- As a rural state, Kentucky will continue to look at innovative approaches to the delivery of health services in rural areas.
- The state information highway will open more opportunities for telemedicine.
- Telemedicine is a cost efficient way of administering health care in urban as well as rural areas.
- Crowding and lack of sanitation in much of the urban Third World create excellent conditions for outbreaks of supposedly extinct diseases like the plague, cholera, or typhoid. While these are less likely to erupt in Western countries, the ease of air travel makes it almost certain that cases will turn up far away, often before health authorities are aware of the first outbreak.
- The large number of people without basic immunizations in our population poses a threat to the population as a whole. Attention to immunizations has lagged with the mistaken belief that many of these diseases are no longer a threat. Kentucky may need to attend to these and similar basic (and usually cheap) health needs.
- Surveys have shown Kentuckians' health habits may be below par and efforts may be needed to improve health education, nutrition, and preventive care.

CRIME AND MISINFORMATION

TREND: Fear, in part the result of incomplete information or misinformation, and lack of confidence in the justice system are influencing the public perception about how to deal with crime.

BACKGROUND: Some believe that the public debate on how to address crime has narrowed to arguments based on fear and not rationality. For example, when the worst crime statistics and horrendous examples of violent crime are publicized, the response too often is to increase law enforcement and build prisons. They feel this leaves unexamined alternative approaches such as job training or other programs to improve living conditions.

These points are supported by the work of Stanley Eitzen, a professor of sociology at Colorado State University. His studies indicate that the public's perception that crime is rising does not agree with the facts. His work also suggests that violent crime is not as prevalent as media stories would lead people to believe. Finally, he posits that the causes of crime are poverty, social inequalities, uneven wealth distribution, and racial discrimination, none of which can be improved upon by building more prisons.

Underlying the punitive response to crime is a growing suspicion that those in law enforcement have been refusing to act within the law and ethics. A recent news analysis uncovered 86 instances over a 20-year period where convictions were based on false evidence.

IMPLICATIONS:

- Only through the wide distribution of information can the public participate in government in a meaningful way. To the extent the media focuses on narrow topics for competitive reasons, that role is diminished. Ultimately, legislative action may be supported for ethics reform or regulation of the presentation of news, despite outcries about interference with free speech. Might there be proposals to certify news reporters? Or might an experiment be made to create one repository of raw news from which the public can glean its own information and draw its own conclusions?
- If law enforcement officials act beyond the law, one may well expect calls for reform. These could take the form of increased penalties, stricter procedures for handling evidence (which in turn may increase staffing requirements and chances for errors), and closer scrutiny of the science used in crime laboratories.
- Should suspicions be heightened about past convictions, studies may be demanded to reopen long closed criminal cases. This would place significant pressure on court systems, and correctional and prosecutorial staffs.
- Responsible leadership will be needed to address the root problems of crime in the U.S. The discrepancies between what a candidate says a problem is and what the elected official knows about a problem can lead to solutions that, at best, correct only part of a problem and at worst completely miss the mark of what is needed. The public doesn't know what to believe and may inadvertently support less effective efforts.

WORKPLACE PRODUCTIVITY LINKED TO EDUCATION

TREND: **Documentation that improved education of workers leads to greater productivity is growing, and more efforts to link school and the workplace are under study.**

BACKGROUND: A new study conducted by the Census Bureau for the U.S. Department of Education finds that "increases in workers' education levels produce twice the gain in workplace efficiency as comparable increases in the value of tools and machinery." Previous studies have documented the degree to which education correlates with higher wages. This is the first broad-based survey to document the degree to which education correlates with productivity. Many economists traditionally have held that the rate of return for education was at least comparable to the rate of return for investment in equipment.

The findings are based on interviews with managers and owners of about 3,000 businesses employing 20 workers or more. The businesses ranged from offices to factories to construction sites. Productivity was measured in terms of sales and controlled for the number of hours worked.

"The report's most striking finding — that a 10 percent increase in educational attainment produced an 8.6 percent increase in productivity — means that for each additional year of schooling in their workforce, employers gain in productivity roughly what employees gain in income."

Among manufacturing industries the impact of the investment in education was strongest for makers of industrial machinery and equipment, including electronics, and for printing and publishing companies. For the nonmanufacturing sector, the effect was strongest in construction and communications. The lowest impact of education on productivity was observed in wholesale and retail trade.

In the first part of the survey, released in February, 1995, employers were found to be increasingly divorced from the schools and expressed a lack of confidence in the schools' ability to train young people for the workplace. The current report finds that employers that make use of student grades in hiring or that make links with schools in the form of internships and training programs are more likely to show higher productivity and more innovative workplace practices. "The lesson that emerges from our research is a simple one...what is required to end the disconnection between schools and employers are more direct, substantive and businesslike transactions between the two."

IMPLICATIONS:

- The 1994 General Assembly directed a study of Kentucky's vocational education system, including community colleges. This is likely to remain a continuing concern.
- Employers stand to benefit significantly from a well-trained workforce. Partnerships with the formal educational system may need to be further explored.
- Lifelong learning will require greater investment in worker training by employers, but will pay off for them in greater productivity.
- Worker training may be a new undertaking for many in the private sector, and they may need assistance in sound program development.

JOB SHIFTS

TREND: **The structure of the workplace is changing, and so are the content, potential and status of various job categories.**

BACKGROUND: Workplaces continue to be restructured or reengineered as firms strive to improve their competitive position. Heavier demands and shrinking funds also pressure nonprofit and government entities toward change. The combined push of competition and pull of enabling technology has led to a major redefinition of jobs.

Blue-collar work is increasingly hi-tech, and sometimes "high-pay". Jobs such as auto repair or steelmaking have been transformed by technology. Forty percent of the factory workers at the new automated Gallatin Steel plant in Ghent, KY, reportedly have college degrees, mostly in mechanical engineering or metallurgy. The 200 workers also will produce as much steel as 5,000 of the old-style blue collar workers could produce. The nation reportedly faces a shortage of 60,000 auto technicians, who today must master complex computerized operations. The Labor Department also has reported or predicts shortages in the construction trades and several other skilled trades.

Many companies have attempted to reorganize by giving greater authority to production or front-line workers, empowering them to make decisions previously reserved for management. Frito-Lay reportedly has organized hourly workers into work teams empowered to make daily decisions. Sony and NEC, Japanese electronics companies long associated with cutting-edge production techniques, are replacing conveyer belts with small groups of workers who assemble a product from start to finish. Lap-top computers and modems, which provide all relevant information to sales or service reps in the field, reportedly have allowed many organizations to streamline these operations. Ideally, these changes increase flexibility, quality and productivity by pushing decisions "down the ladder" to the people who actually do the work. They enhance the value of front-line workers, and make many managers obsolete.

In his 1994 book, *Jobshift*, William Bridges touts a new order of "post job organizations," where there are no titles or bosses, but rather a collection of employees who do what needs to be done at the time. These cutting-edge organizations, according to Bridges, share four traits:

- They encourage employees to make operating decisions that used to be reserved for managers;
- They give all employees information that used to be given only to managers;
- They give employees training to instill in them the kind of understanding of business and financial issues that traditionally have concerned only owners and executives; and
- They give employees a share of company profits, or otherwise a stake in their work.

The current round of restructuring has thrown thousands of middle-management employees out of work. Others have kept their jobs, but with more work and less security. Toyota is said to be one of several companies which now sets age limits for middle managers, in a move intended to rejuvenate management ranks. An annual survey of managers by the American Management Association finds widespread erosion of morale at companies with job cuts. Unless downsizing is accompanied by a real reorganization of work, remaining employees often find themselves working longer hours, with no salary increase, to cover for the lost workers.

Worker skills and continual training are widely considered keys to maintaining a competitive workforce, yet training often is cut, not expanded, when companies restructure. At 1.4 percent of payroll, U.S. employers are spending relatively little on training, and amounts have grown less than inflation since 1990.

"Empowerment," for many of today's workers, merely means they now carry risks which used to be shared with the employer, that they must keep themselves valuable, obtain their own benefits, save for their own retirement.

Firms and government are cutting back on defined-benefit retirement plans that hold the employer responsible for supplying a stated level of benefits at retirement and are turning instead to fixed-contributions plans, which allow workers to set aside part of their earnings in self-administered retirement accounts - 401(k)s and the like - to which the employer may or may not contribute.

Self-directed plans, such as 401(k), are popular with employers because they are cheaper to administer and shift the risk of investment performance from the employer to the employees. The plans are portable, a boon to job-switching employees, and vest immediately. Still, serious concerns have been raised about the ability of defined contribution plans to support future retirees: Nothing is guaranteed under defined contribution plans. If money is unwisely or unluckily invested, the employee could end up with nothing; the introduction of 401(k) plans often results either in reduced funding or elimination of previously offered defined benefit plans; early studies indicate that employees are not saving enough for a secure retirement under voluntary plans; employees are not as well versed in making investment decisions, on the whole, as are the investment specialists with fiduciary responsibilities who operate the defined benefit plans. Inappropriate investment decisions will reduce assets available to many retirees, and could lead to many falling into the welfare system after retirement.

Hundreds of companies have found that they can save money by contracting out non-core operations, and can use a contingent workforce to do work previously done by permanent full-time employees. A quarter of those employed today work on a temporary, part-time, or contract basis. Many former employees who lost their jobs are going into business for themselves. New business incorporations last year were running at the highest level ever, at 737,000 per month.

The new hi-tech economy also has consigned a class of workers to a Dickensian time warp, laboring not just for meager wages but also under dehumanized and often dangerous conditions. Automation, which has eliminated much of labor's backbreaking drudgery, has created new types of dehumanized labor, where work is reduced to limited tasks that are numbingly repetitive, subject to electronic surveillance, potentially crippling, and stripped of any meaningful skills or the chance to develop them. A December 1994 article in the *Wall Street Journal* singled out the dangers of poultry processing plants. Other examples have been noted in white-collar jobs like telemarketing or bill processing.

IMPLICATIONS:

- The future is here; will we face it with the tools of the past? This has not always proved the best way to deal with problems.
- For purposes of economic development, such industrial classifications as services and manufacturing, or job classifications as blue-collar or white-collar, are overly broad and somewhat outdated. It is more useful, perhaps, to consider work in terms of added value. High added value should be the goal - in whatever industry - since that is what determines an economy's competitiveness and its workers' standard of living.
- Government may need to modernize work and safety regulations so they apply to today's dangerous jobs, not just those of yesterday.

- An increase in total number and quality of blue-collar jobs, and the declining quality of many white-collar jobs should affect labor unions. But how?
- The method of craft-based production challenges the primacy of assembly lines, which have controlled factory production for most of this century.
- Are we losing touch with an understanding of what is concrete, productive labor and what is necessary to produce it?
- Defined contribution plans have the advantage of portability. An employee can move from job to job without sacrificing this kind of nest egg. This could lead to greater job mobility of middle-aged employees.
- If voluntary plans augment defined benefit plans, then they can increase the total resources available to future retirees. However, if such plans replace defined benefit plans, retirement income could be reduced for most retirees.
- Social Security functions as a safety net for individuals who, by bad planning or bad luck, do not amass enough assets to support themselves after retirement. The ongoing shift to individual retirement savings increases the importance of this safety net.
- Individual savings plans lose the benefits of averaging. Each person must try to amass sufficient assets to support himself or herself comfortably in retirement.

WORKING WOMEN AND MEN

TREND: **Increasingly, working women are their family's main support.**

BACKGROUND: Increases in the number of working women have affected many of the social and economic changes of recent decades. The proportion of women in the labor force has grown steadily since the 1950s and, while rates have stabilized in recent years, there is little likelihood of a decrease.

Women are more likely to be the main breadwinner for their families than in past years. In its report "Women: The New Providers," the Families and Work Institute found that women earn about half or more of the income in 45 percent of all dual-earner families. Add to this the growing number of households with a woman as sole breadwinner and the number is even more dramatic: 55 percent of all working women earn about half or more of the income which supports their household.

The steady increase in women workers has been accompanied by a long-term and widespread decline in men's labor force participation rates, from 83.3 percent in 1960 to 75.2 percent in 1994. While much of this decline can be attributed to early retirement, it seems that the decline for prime-aged men, 25-54, is largely the result of family decisions. As more wives go to work, more husbands can go back to school, try to start a business, or stay home with the kids. Men in this age group who are not working or actively looking for work typically are considered "surplus" or "discouraged" workers. In fact, eight of ten men in this category who were surveyed by the Bureau of Labor Statistics (BLS) in 1994 said they do not want a job because they are busy with other activities.

The importance of women's earnings to families' well-being increases concern over the continuing gap between the earnings of men and women. The data series maintained by the US Department of Labor shows steady progress in closing that gap, although in 1990 women still earned only 71.5 cents for every dollar men earned. Among young, educated workers, the gap is said to be close to disappearing. Data from the 1990 Census, however, show a much darker picture; according to census data, which includes employee as well as self-employment income, median full-time earnings for women were 59 percent of males' in Kentucky, and 61 percent of male earnings in the U.S.

IMPLICATIONS:

- Since so many women now head households or are the main support of their children, low pay scales for women have direct impact on the welfare of children and on poverty levels of families. Almost 25 percent of Kentucky children live in poverty.
- Society seems to have accepted working women much more easily than non-working men. As the taboo against non-working men who stay at home and care for the children lessens, more men may drop out of the labor force.
- Married women continue to do the greater portion of household work, regardless of their contribution to family income. As more women become breadwinners, will more men shoulder home chores? Take on volunteer work?

GAMBLING

TREND: An increase in the number and variety of ways that people can gamble is impacting traditional racetrack attendance, and the ability to circumvent state and federal gambling law is growing.

BACKGROUND: Over the last decade race track attendance in the USA dropped by 41 percent, from about 50 million in 1985 to about 30 million in 1994. In the same period casino gambling rose from \$100 billion to \$300 billion; lotteries gross wagering from \$5 billion to \$32 billion; other forms of legal gambling from \$10 billion to \$50 billion; and off-track betting from \$2 billion to \$7.5 billion; while thoroughbred live racing bets declined by 43.4 percent, from \$7.6 billion to \$4.3 billion

Off-track betting affects track attendance. In California 70 percent of all money wagered on thoroughbreds in 1994 came from off-track betting. Many argue that betting parlors keep people from coming to the track. Some predict that within a decade only 20 racing tracks will still be open, compared with 128 at present. Small tracks already are being forced to close down; others have started offering such attractions as casino type gambling or amusement areas for children and adults. The question remains whether slot machines or other attractions are able to pull new race-goers and keep old ones at the track.

Horseracing is likely to find itself competing with unregulated forms of gambling. The recent phenomena of "virtual casinos" makes gambling available at home on the computer through the internet. To avoid U.S. gambling laws, the first online casinos are locating their operations offshore, in countries where gambling laws are less strict or nonexistent. However, anyone with access to the internet can log in and play. Cruise ships are using a similar tact to avoid U.S. gambling laws. They cruise to the three-mile off-shore limit, beyond which they open up casinos and sports betting. Casinos on tribal lands have been another way of allowing gambling operations outside of state laws. Because of the money to be made in gambling, these new sources of gambling activity are likely to continue in operation and expand. Their impact on such traditional gambling activities as horseracing could be significant.

IMPLICATIONS:

- The horse racing industry may be facing a crisis which needs to be addressed; new forms of legal gambling are nibbling away at the once lucrative race industry.
- With governments relying more and more on gambling for revenue or as economic development, concern about the social costs that may arise from pathological addictions to gambling may grow.
- There will be revenue impacts if there is a loss of taxes from regulated gambling operations.

SHIFTING NEEDS FOR MEDICAL PERSONNEL

TREND: The move toward managed care continues, and could affect the mix of health care professionals who are needed to provide service.

BACKGROUND: Assuming no change in current trends, ten years from now, the U.S. will have 165,000 more physicians than it needs, according to a Johns Hopkins University study (Jonathan P. Weiner, "Forecasting the Effects of Health Reform on U.S. Physician Workforce Requirement: Evidence from HMO Staffing Patterns," in the *Journal of the American Medical Association*, 272(3)). On the other hand, the American Association of Colleges of Nursing predicts a shortage of allied health professionals. The expected change in demand is attributed to the movement toward greater efficiency and reduced costs under managed care. The shortage of nurses is blamed on low pay of nursing school faculties and graduates, compared to medical specialists.

IMPLICATIONS:

- Kentucky may need to study whether the expected physician surplus/allied health professional shortage would hold true for rural areas, where managed care is more difficult to provide.
- Kentucky law may need to be reviewed to see if it provides the right mix of incentives for training primary care physicians, on the one hand, and allied health professionals, on the other.

QUALITY OF LIFE

TREND: **Providing for basic living needs of citizens is of growing concern.**

BACKGROUND: Shelter and food are basic human necessities. Lately, the provision of shelter and water, is becoming an issue of concern.

The first of these necessities is housing, which is, according to Rochelle L. Stanfield in her article in the *National Journal*, "The Good, the Bad and the Ugly", the only basic human need that is not guaranteed by the federal government. In a report from the Department of Housing and Urban Development, the number of households with "worst-case" housing needs increased in the period from 1989-1991 by 8 percent; this accounts for over 5 million people in the United States. Federal housing programs meet only 16 percent of the households most in need. In that same period, the income increases of the poor were exceeded by housing cost increases by 3.4 percent. Good quality housing exists, but at a premium. If the needs continue unmet, the plight of the poor will only intensify.

Another aspect of the quality of life emerges as a significant issue — safe and affordable water. The national trend is to increase costs every two to three years. According to *U.S. Water News*, in addition to the aforementioned trend, the South imposes the highest charges for wastewater disposal, but has the lowest rate of increase for the service. Also, the article indicated a trend toward rate structures that promote conservation—ones that do not give volume discounts. A report from the Kentucky Public Service Commission states that Kentucky does not share this rate structure ideology. Also of note, in Kentucky, water districts' bills have increased 35 percent while water associations' and private companies' bills are down 2 percent and 16 percent, respectively.

Now with that in mind, consider the furor over the cryptosporidium microbe that infected 400,000 people in Milwaukee recently. According to the article in *Governing*, the EPA is mandating that waters systems with a customer base in excess of 10,000 people test for the microbe. Preliminary studies have indicated that 80 percent of surface water and about 25 percent of drinking water contain this microbe. Water quality will have to be addressed in some form, especially since the demands on water services are increasing. The demands on water service will have to be met, but not at the costs of sacrificing quality for quantity.

IMPLICATIONS:

- There may be a need to examine whether the housing issue should be addressed in a different manner, to better take care of these people who are getting left out.
- Kentucky may need to consider incentives for water conservation.
- The legislature may be asked to address the issue of rising water rates.
- Concern about water quality may be on the rise. Congress has been wrestling with amendments to the Safe Drinking Water Act, balancing costs of unlikely contaminants against benefits of protecting safe water. The Senate, in November, unanimously passed a reauthorization bill which authorizes state revolving funds, removes some of the most onerous testing requirements, and allows approval of alternate monitoring requirements. The final form of this reauthorization will affect state actions.

NONPROFIT ORGANIZATIONS

TREND: Tax preferences for nonprofits are being questioned.

BACKGROUND: Nonprofit organizations control a significant part of the economy, and are especially important in such sectors as education and health care. A recent study by the Louisville Area Chamber of Commerce found that nonprofit organizations, dominated by the seven local hospitals, contributed \$1.3 billion to the local economy, and employed 18,500. In addition, this sector provided an estimated \$23 million in the form of volunteer services.

Increasingly, the tax benefits enjoyed by nonprofit organizations are being scrutinized. The commercial behavior of some organizations has destroyed the goodwill they once enjoyed. Budget-conscious towns, cities, and states are fighting to make them either pay property taxes, or make payments, or provide services to help offset the loss of property taxes. Thirty-five states reportedly filed suits in 1994, challenging institutions' rights to escape local property taxes. States also have begun forcing nonprofits to meet stricter rules to ensure that all tax-exempt property advances a charitable cause; marinas and office buildings, for instance, have been returned to the tax rolls, despite ownership by a nonprofit organization.

Using the crude overall measure of expenditure data, nonprofits comprised over 30 percent of the U.S. health care market in 1989. Richard Frank and David Salkever, writing in the *Journal of Economic Perspectives*, predict that as more detailed information on the quality of care becomes available, the nonprofit "title" will become less important as a signal of trust to consumers. They see the closer scrutiny of nonprofit health providers as an attempt by government to assure that nonprofits provide social benefits in exchange for tax breaks.

IMPLICATIONS:

- Will Kentucky consider performance criteria for nonprofit health care providers?
- Are there signs that the tax exemptions granted to all church-owned property in Kentucky have significantly eroded local government tax bases?

RESHAPING COMMUNITY EXPECTATIONS ABOUT INDIVIDUAL BEHAVIOR

TREND: **Communities seek to instill within individuals a sense of personal responsibility for their actions.**

BACKGROUND: Maine Governor John McKernan explains the popularity of a program that revokes state drivers' and professional licenses of parents who fail to support their children. He says that Maine taxpayers understand the connection between a heavy tax burden and the refusal of individuals to care for their children. Kentucky enacted legislation in 1994 (HB 311) which permits the denial or suspension of a driver's license if a person is in arrears in child support payments equivalent to one year of nonpayment.

A non-punitive approach to achieve the same end of getting individuals to accept their responsibilities as parents is the Minnesota Parent's Fair Share program. This program points out to individuals what their parenting responsibilities are and indicates what tools are available to meet those responsibilities.

Similarly, a program in Louisville provides counseling and job training in an attempt to put drug offenders back in control of their lives as responsible citizens. The 1994 Kentucky General Assembly passed legislation which prohibited possession of handguns by minors without parental supervision and making parents liable in certain instances.

More controversial legislation involving parental responsibility are ordinances enacted in many communities that hold parents accountable for the criminal acts of their children.

IMPLICATIONS:

- The social costs imposed by certain individuals' actions may be expected to prompt legislative enactments to curb those actions. Criminalizing drunk driving is an example. Finding ways to encourage individuals to shoulder the financial responsibility of childrearing is another example.
- Trying to define individual responsibilities can be expected to engender heated debate. The harm to society of drunk driving can be agreed to despite differences of culture, race, religion, sex, or the myriad other interests by which people align themselves. The social costs of refusing to clothe, shelter, and feed offspring can also be agreed to by a cross-section of community interests. The debate will flare when pressure builds for a social response to unchecked individual actions but agreement can't be reached about the nature of the response. For example, does an individual have a responsibility to maintain good health by making healthful lifestyle decisions, or by forsaking high risk thrill sports and adventures? Is there a social cost for failure to remain in good health? How should that cost be allocated between the individual and society or among different segments of society?
- If government budget woes moderate and taxes stabilize or drop, one might expect the focus to shift away from legislating the parameters of individual actions.
- As debates take place over individual versus community responsibility, the nature of "community" may be expected to be clarified. More common ground, like the care of children and safe highways, will be found. That same debate may also reveal laws that clearly are not wanted or deemed necessary by a more-inclusive and representative community.

PACE AND SCOPE OF SOCIETAL CHANGE

TREND: **The pace and scope of societal change are increasing in the U.S., which makes the issues facing governments more complex and less amenable to static government policies.**

BACKGROUND: According to most pundits, the advent of major innovations in communications and data-processing technologies is profoundly affecting social organization. For example, William Wished, President of World Trends Research, argues that the current level of societal change is as profound as any since the Renaissance, but with a much increased speed and a much wider coverage. In the emerging age, he believes that the dominant features will be constant change rather than continuity, the world community rather than the nation-state will be the defining political and economic framework, the amount of information confronting individuals will explode, with little filtering of the messages available. This is expected by many to lead to cultural fragmentation, as external forces change the demands on such institutions as religion, the family, and government.

Columnist E.J. Dionne concludes that these types of changes yield three particular societal disruptions. First, as the U.S. economy becomes more and more driven by technological innovation in an environment of global competition, opportunities for economic growth are being created. However, as the nature of the economy changes, many workers, particularly those with only basic skills, are being displaced or live in fear of displacement. Second, because national and regional governments have less ability to control the economic fortunes of their citizens, there is a general reduction in perceptions of governmental authority and relevance.

Finally, these changes mean there are no clear and reliable rules people can follow to ensure their long-term economic stability. While the resulting "highly mobile, fiercely competitive society" offers many opportunities for individuals who can adjust to rapid change, it also puts nearly overwhelming pressures on the institutions which developed to maintain social order in a time of greater continuity. Dionne concludes that the most effective strategy for government now is to not waste resources in a vain attempt to control change, but to direct its efforts toward easing the pain caused by the resulting economic and social disruptions experienced by its citizens.

While acknowledging that technology, particularly computers, has had a significant effect on the economy, it is important not to overestimate that effect, and thereby misunderstand the true forces of change. "Cyber inequality", or the difference in technical skills, is often given as the reason that the earnings of a recent male college graduate increased from 30 percent more than those of a recent male high-school graduate in 1979, to 70 percent more in 1993. Robert J. Samuelson notes that "two thirds of the increase of inequality does not reflect growing gaps between more and less educated (or computer literate) workers.... Rather, it reflects bigger gaps among workers with similar educations." He argues that companies are directing more money to those workers who are the most productive in improving the economic health of the company. Since it is only an adjunct to other skills, the computer (or any new technology) has the potential to be a democratic machine, whereby the communication and computational power embodied becomes easier for all to access. This would leave all individuals more able to compete on the basis of the non-technical characteristics of talent and effort. "Sure, our economic and social well-being would improve if some of our worst workers had better (technical) skills; but the skills they need more are basic literacy and good work habits." These, coupled with a high tolerance for constant learning and relearning, are the skills likely to be most useful in the next stage of economic organization.

IMPLICATIONS:

- Increases in the pace and scope of societal change are likely to create many new opportunities for those individuals and organizations who adjust quickly and appropriately. Those who don't adjust are likely to find their economic prospects at risk.
- The absence of stable "rules" for gaining and keeping economic prosperity, coupled with the reduced ability of governments to directly affect the economic well-being of their citizens, is likely to cause citizens to have less confidence in the power of government even while demanding more of its help to cope with the constantly changing economic terrain. This could mean that governments will have to emphasize opportunities for life-time learning, facilitate access to information resources, and provide short-term assistance to ease financial disruption during periods of employment transition.
- In order to provide services their citizens will most need, governments will have to learn to adjust quickly. They may have the most success if they concentrate on creating flexible units which can address emerging issues as they arise, and tailor their services to the needs of local communities with varying problems. An image of government as a clearinghouse for assistance in finding and accessing resources may replace the current one of government as a warehouse for provision of resources.

CHANGING ROLE OF STATE AND LOCAL GOVERNMENTS

TREND: State and local governments are having to assume greater responsibility for addressing increasingly complex issues while facing restrictions on traditional sources of funds.

BACKGROUND: As the pace of social change accelerates, and as the role and nature of the federal government is altered, state and local governments are having to adjust to the new realities they face. In general, the trends are toward state and local governments having greater responsibility for increasingly complex issues. However, there is strong resistance to tax increases to meet those responsibilities. Tax limitation measures have legally restricted the ability of many state and local governments to raise various taxes.

One response of state and local governments to restrictions on tax increases is to expand reliance on user fees. For example, some have begun to use pay-per-call 900 numbers to provide government information. Loudon County, Virginia uses the 900 service to provide property information to real estate professionals and other non-property owners. A call to the 900 number costs \$2 per minute and usually lasts 3-4 minutes. Wyoming's hunting license lottery, which tends to get flooded with calls, is using a 900 service to inform hunters of their status. And, when Arkansas passed a law requiring damage information to be disclosed to prospective car buyers, the state established a 900 number for callers wanting more detailed information from the state Office of Motor Vehicles. Many libraries have implemented "patron user fees" on all but the most basic of services, borrowing a book. Several have launched for-profit ventures, such as information searches for businesses. The Milwaukee Public Library offers this service at a charge of \$40 per hour, plus \$6 per hour for on-line searches. Others have turned to opening coffeehouses and cafes adjoining the library, or gift shops in which patrons can purchase everything from tee-shirts to books on tape. Other innovative ways to impose the costs of governments on users are likely to develop. One criticism of user fees is that they are regressive — they impose a higher cost on low-income citizens (as a percent of income) than on high-income citizens. This could become a serious concern if user fees are applied to services that are considered "necessary."

No matter how they decide to finance themselves, it is clear that state and local governments are facing extremely complex issues with profound implications. To highlight the breadth of this complexity, two examples of such issues are briefly noted. They are state regulation of the telecommunications industry and the consideration of welfare reform. Most would agree that the massive changes occurring in the telecommunications industry are the fuel that is driving the U.S. into the "information age." The rapid reorganization of the telecommunications industry is largely the result of the combination of technological development and significant federal deregulation. States are starting to grapple with the issues of access and privacy while being careful not to impede development of a system that will support economic development.

Wisconsin recently enacted a law that ended traditional rate regulation of local telephone companies, ended the exclusive franchise of its largest service provider, required its largest network to rent access to other firms at its own cost, replaced profit ceilings with price caps, to encourage efficiency, established funds to provide service to all residents and to retrain workers displaced by new technology, and instituted privacy protections on the selling of personal information. This was not a "simple little bill." A high level of technical and economic expertise was needed to create such a piece of legislation with reasonable assurance that there would not be large unforeseen negative consequences.

Welfare reform is an equally complex issue with profound implications. It is very clear that the likely outcome of redefinition of the federal government will be somewhat restricted funding, and much reduced federal regulation, of state-administered programs for the poor. While this will give states the opportunity to develop programs tailored to the particular needs of their citizens, it also will place on them a great burden of responsibility for designing programs that work to humanely support those who need help long-term, while moving those with solvable problems into the mainstream economy.

Theodore Caplow argues that the first step in designing public policies which work is to remove or mitigate the "perverse" incentives that were designed into the existing programs. Perverse incentives are those unintentionally built into programs which cause participants to act in ways counter to the goals of the policy itself. The author says:

Too many designers, working at cross-purposes with limited knowledge of the behavior they were trying to change and unwilling to learn from experience, created perverse incentives. Built into health care are powerful incentives for providers to raise their fees, and for patients to accept unnecessary procedures. Built into welfare are punishments for unmarried mothers who marry or take jobs. Built into the criminal justice system are lavish rewards for drug-dealing. Built into the liability system are incentives for insurers to reduce protection, for claimants to seek extravagant compensation, and for lawyers to promote nuisance suits.

In designing public programs it is critical for state officials to understand that program participants act in response to the incentives in the program, *not* in response to the wishes of the policy makers. Thus, it will be increasingly important for state program designers to have a sound understanding of the actual nature of existing problems, rather than relying on conventional wisdom. For example, recent research indicates that the economic impacts of an unplanned birth to a single woman vary by the woman's race but have generally declined over time. This may mean that, except for black women (who experience more persistent negative economic consequences of an unplanned out-of-wedlock birth), social support programs for children might more appropriately be based on the child's poverty status rather than on his or her birth situation. Other research indicates that existing beliefs about the effects of welfare program provisions on fertility, labor supply and divorce may be incorrect, because they have not taken into consideration the possibility of parental support. If support in the form of house-sharing is added to direct money transfers, then average parental support substantially exceeds the average amount of public assistance. It was also concluded that the level of parental support is responsive to the amount of other income (either earnings, child support, or AFDC) received by welfare recipients, but was not very responsive to changes in the incomes of the parents.

From these two examples it becomes clear that, in order to design workable programs for complex issues with varying local conditions, state and local governments may need to develop greater expertise in policy research. Such an effort is underway in several states. The State Policy Network, an affiliation of regional think tanks "dedicated to promoting free-market approaches to government at the state and local level," has 48 members. These, and other regional research groups, are beginning to play an important role in helping states better respond to the new responsibilities being transferred from the federal level. "As you get down to lower levels of government, things become less a question of who's liberal or who's conservative... and more about the challenge of using limited resources most effectively," says Byron Lamm, executive director of the State Policy Network in Fort Wayne, Indiana. "State-based think tanks have come up with some powerful approaches for improving local government because a lot of it turns out to be common sense, not ideology or turning lead into gold."

State-based research groups have focused attention on local conditions. A great deal of interest was generated in Ohio by a simple 28-page report published by the Buckeye Center which compared the state's 19 largest cities, using only the categories of crime statistics, local personal income, property tax rates, and relative government overhead. Some local officials used the report to call for changes in local property tax rates. Other organizations have held local competitions among citizens, seeking ideas for improving the

efficiency of state and local governments. The research organization has then lent its assistance in developing formal policy proposals and draft legislation out of the ideas it has judged to be best. A recent contest yielded design improvements to a \$4.5 billion waste-water treatment plant in Boston Harbor which reduced construction costs by 25 percent. Regional think tanks have also tried to provide a forum for academics from state universities who fear that applied research on local problems will not enhance their academic reputations. It has become common for academics to serve on advisory councils or act as senior fellows for local research projects.

IMPLICATIONS:

- State and local governments will continue to search for innovative funding schemes, as they confront increased responsibilities, along with calls for tax relief. User fees are likely to become more popular. User fees are considered politically viable, although they may restrict access of low-income citizens to government services.
- State and local governments must decide whether, or how, to regulate technically complex and rapidly changing sectors of the economy. Efforts to balance access, privacy, and quality-of-life concerns of citizens, while not unintentionally impeding economic growth, will require a level of expertise not traditionally available in many local areas. Yet those areas which do not manage such industries wisely could find themselves with competitive deficits which will be difficult to overcome.
- If, as expected, the federal government cedes management of many social programs to the states, state policy makers may have the opportunity to remove existing perverse incentives, which reduce program effectiveness. However, state program designers will have to base new program features on a careful understanding of the social problems as they exist locally, or they will create their own set of perverse incentives. Since the federal government intends to limit the amount of funds it will give to states to support on-going programs, states will have the responsibility for either making up any shortfalls from their own resources, or will have to limit their citizens' access to assistance.
- State and local governments which quickly develop and utilize the expertise necessary to analyze local problems and develop workable local solutions will be in a much stronger position to take advantage of the opportunities and avoid the dislocations which will arise from major changes. While regional think tanks can improve the ability of officials to understand regional problems, it is also possible that their analyses could suffer the same type of political biases evidenced by some national think tanks. State and local officials should make sure that results reflect solid analysis, rather than the policy agendas.
- With many libraries offering access to their holdings on-line, only 27 of Kentucky's 120 counties even have their library circulation records on computer. Kentucky ranks third from the bottom in per capita support of libraries. In an information age, equality of access to information is vital. The state may need to examine the use of libraries, and their funding, to help meet the information needs of all Kentuckians.

RE-ENGINEERING THE POLITICAL SYSTEM

TREND: **Voter apathy continues to be a concern, along with the viability of the two-party system. Innovations that would "re-engineer" the political system are emerging.**

BACKGROUND: Ross Perot won 19 percent of the vote in the 1992 presidential election. While he won no county outright, he ran strongly through much of the non-metropolitan north and west. In that same election, 4 in 10 eligible voters did not go to the polls. Non-voters were concentrated largely in areas which did not support Perot, including much of the South.

In addition, a major new poll announced in 1994 by the Times Mirror Center indicates that Americans have become more bitter, cynical and selfish over the past 7 years, and ever more distrustful and hopeless about their government.

Dr. Yanarella of the University of Kentucky recently discussed a related (but less recent) survey called "None of the Above: Alienated Citizens Talk Back," which details findings about non-voting citizens in Fayette County who were surveyed in October 1991. The survey did not find non-voters to be politically apathetic or uninformed. They often reported feeling deeply, even passionately, about political issues. They were frequently active in local educational and religious institutions. But they reported believing that elected officials consistently fail to hold up their end of the bargain by creating barriers to citizen participation, or treat public office as a means to personal career advancement rather than a public trust. According to the report, these disaffected non-voters seemed if anything to care too much. When disappointed or failed by the political system, they responded by withdrawing from the system.

Some feel that many of the problems which bedevil American elections are characteristic of the election system we use — single member plurality elections. In this system, rare in other democracies, one member is elected from each district, and the candidate with the most votes wins. Significant minorities in any district are not represented, and minor parties have virtually no chance of representation. Some argue that this voting system, discarded in favor of proportional voting systems in most countries, is a major cause of low voter turnout, "Tweedledum and Tweedledee" candidates (candidates so similar they offer no real choice), campaigns which focus on personalities rather than issues, lack of minority representation, and gerrymandering, among other problems. The author contends that it is the system, not the candidates or voters, that is bad.

Proportional representation systems elect several members from each election district, according to the proportion of votes cast for each party or candidate. A district might elect 10 representatives from 3 or more parties, so it would take relatively few voters to elect one representative. Several types of proportional representation are in use; a "party-list" system is widely used by Scandinavian countries. In this system, voters cast their votes for a party list, not individual candidates, and parties receive seats in proportion to their share of the vote. The "additional member system" is used in Germany and many of the new Eastern European democracies. Voters cast ballots both for individuals and for a party. If the number of individual candidates who win is less than the proportion of votes the party gets, the party can appoint additional members to attain the proportion it deserves. A single transferable vote system was used in some American localities earlier in this century, and still is used in Cambridge, Massachusetts, as well as in a few countries. This involves a process of vote counting that maximizes the effectiveness of votes. Voters rank their choices and votes can be shifted among candidates based on this ranking. Any of these systems, according to the author, elect governing bodies with a makeup close to the distribution of votes cast.

The election system hardly is an issue in the U.S., in part because most voters are not aware that there is any alternative. Also, a switch to any kind of proportional voting system would reduce the power of the two major parties, so virtually no one currently in power has an interest in change. Many people confuse the method of voting — plurality or proportional — with the system of government — presidential or parliamentary, etc. — and fear that proportional elections would mean that shifting legislative coalitions would bring down the ruling government, something which happens where the government is formed by the legislature, not elected separately, as in our system.

Other countries with single-member plurality elections are Great Britain, Canada, and New Zealand. The election system is a major issue in those countries. New Zealand recently passed a referendum to change its system, system changes were included in the 1992 Canadian Constitution proposal (which failed in the end), and there have been major efforts in Great Britain to change the voting system.

IMPLICATIONS:

- If turnout remains low, and mainly the people who are upset at the moment go to the polls each time, each election could veer the ship of state to the opposite side from the past election.
- Third parties seldom have any chance in the current system. Thus the level of dissatisfaction must get extremely high before it registers at the polls at all. By that time it may be too late to salvage much continuity at all.
- Attention may need to be paid to finding new ways to help alleviate skepticism about government by making information more available and government services more efficient.
- If "re-engineering" continues to be a trend and is applied to the political system, other new ideas may emerge on fundamental change needed to convince voters in a democracy that their votes can make a difference.

EXTERNAL COSTS OF DRIVING

TREND: Governments continue to look for additional non-tax sources of program funding in the transportation arena.

BACKGROUND: According to a book entitled *The Going Rate: What it Really Costs to Drive*, heavy use of cars and trucks in the U.S. is partly due to economic and political forces that mask the full costs of driving. Costs of driving are categorized as "market" or "external." Market costs are reflected in economic transactions, such as buying a car or fuel. External or hidden costs are not reflected in these transactions. Market costs not paid directly by U.S. drivers amount to \$170 billion a year, including road construction and repair, highway services, and parking that is often supplied free. Non-driving taxpayers help cover these costs. External costs of about \$126 billion a year include air pollution, the rising risks of climate change, security costs of importing oil, congestion, motor vehicle accidents, noise, vibration, and land loss. Together, these costs amount to almost \$300 billion a year, more than 5 percent of GDP. Those who enjoy the benefits of motor vehicle use should pay for the costs directly, as close to the time and place where the cost is incurred as possible. Potential "polluter pays" policies include increased fuel taxes (perhaps including partial costs of auto insurance), an annual charge on trucks according to weight-per-axle and annual mileage, van-pooling incentives, tolls, time-of-day pricing of congested roadways, and reform of zoning and land-use planning.

IMPLICATIONS:

- As it becomes harder and harder for government to make ends meet, charges based on modes of transportation become more likely.
- International agreements and interstate commerce questions may restrict what states can do in taxing various transportation modes.