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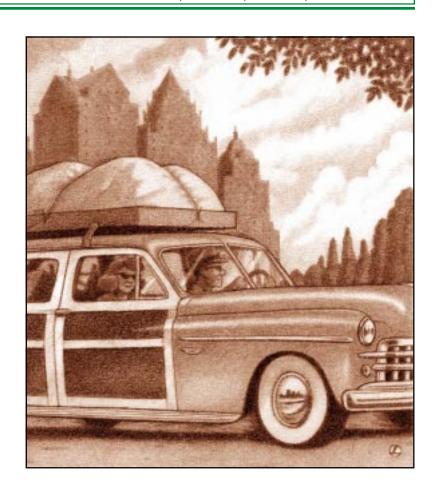
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502 South 19th Avenue, Suite 211, Bozeman, Montana 59718

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#### PERC REPORTS

EDITOR Jane S. Shaw

ASSOCIATE EDITOR Linda E. Platts

PRODUCTION MANAGER Dianna L. Rienhart

ARTIST James Lindquist

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#### 502 S. 19th Avenue, Suite 211 Bozeman, MT 59718 Ž (406) 587-9591

Fax: (406) 586-7555 E-mail: perc@perc.org www.perc.org

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## SUBSIDIES AND THE SUBURBS

By Ronald D. Utt

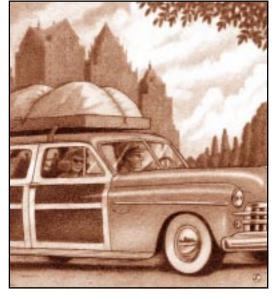
rowth-control advocates  $oldsymbol{J}$  claim that many federal programs and laws have contributed to sprawl. Their short list includes mortgage insurance programs of the Federal Housing Administration (FHA) and the Veterans Administration (VA), the deductibility of mortgage interest payments from taxable income, the federal highway program, HUD's low-income housing programs, federal grants for water supply and treatment facilities, the Clear Air Act, the EPA's regulations regarding redevelopment of "brownfield" sites, and its program of "environmental justice."

The mayors of some large cities share this view of the federal impact. For example, Mayor Stephen Goldsmith of Indianapolis says, "Federal urban policy drives wealth out of the cities. In

fact, if we specifically designed a 'suburban policy' to drive investment out of our cities, it would look a lot like the current system" (Goldsmith 1997, 89).

A survey of 240 members of the Society for American City and Regional Planning History revealed that experts in urban history, planning, and architecture consider interstate highways and federal mortgage programs as the top two factors influencing the American metropolis over the past fifty years (Fishman 1999). Nowhere on the top ten list were such items as population growth, poor schools, or high central-city crime rates.

Yet the evidence that federal policies created



The evidence that federal policies created sprawl is virtually nonexistent. This is at variance with popular perceptions.

sprawl is virtually nonexistent. In 1998, reflecting the popular view, Senators James M. Jeffords (R-VT) and Carl Levin (D-MI) asked the U.S. General Accounting Office (GAO) to describe the evidence that exists on the impact of current federal policies on urban sprawl. After studying the academic literature for months, the GAO (1999, 19) could not find any definitive impact and concluded that the extent of federal influence is not well documented or quantified. While this conclusion is at variance with popular perceptions, it is consistent with the factual evidence on metropolitan area growth trends. These facts are worth reviewing.

F ederal mortgage insurance programs first appeared in

1934 with the creation of the Federal Housing Administration (FHA). Because of the Depression, it was not until the emergence of postwar prosperity in the late 1940s and early 1950s that homeownership took off and FHA mortgage insurance, along with the newly enacted VA mortgage guarantee for returning war veterans, became more widely used by American households.

In the fifty years prior to World War II, the homeownership rate in the United States fluctuated between 45 percent and 48 percent, except for the 1930s when it fell to 43.6 percent. It accelerated past 60 percent in the decade and a half after the war, and

#### SUBSIDIES AND THE SUBURBS

remained within the mid-60 percent range from 1960 through the present. However, in 1950, FHA mortgages amounted to only about a third of the volume of outstanding conventional mortgages. By 1955 FHA's share had fallen to 29 percent and has remained well below 20 percent since 1980. In fact, by 1997, outstanding FHA mortgages amounted to just 12 percent of the volume of conventional mortgages (White House 1999, 416).

Thus, while suburbanization was surging, the FHA mortgage program was diminishing rapidly as a

factor in the U.S. housing market. It is doubtful that the FHA is responsible for this surge, given its relatively modest, and declining, role in mortgage finance during the postwar era.

The period of rising homeownership and suburbanization also coincides with the rapid growth of metropolitan areas, largely the result of major demographic shifts from the countryside to more urbanized areas. In 1940, 56.5 percent of the population lived in urbanized areas, but by 1990 that share had risen to 75.2 percent as rural areas and small towns declined in population (Bureau of the Census 1975 and 1995).

Much of this shifting and growing population chose to live in the suburbs, not the cen-

tral cities. In 1950, the central cities of the ten largest metropolitan areas held 60 percent of these areas' populations, while 40 percent lived in the suburbs. But because suburban populations in 1950 were growing ten times faster than central-city populations, these shares drew even by 1960, and by 1990 had reversed themselves. The suburbs now claim a 60 percent share (GAO 1999, 1–5).

It is important to recognize that most of the major central cities, particularly those in the East, had been fully built to their borders by the early 1950s. Therefore, the growth in the postwar population could be accommodated only by developing the surrounding areas. At the same time, 1950 marked the peak population for many of the older central cities, and the exodus of city residents, which continues to-

day, also contributed, albeit modestly, to the growth of population and housing in the surrounding suburbs.

Another important factor contributing to homeownership and suburbanization was the growing obsolescence of central-city housing relative to what the postwar middle class could now afford in terms of size (house and lot), privacy, and quality. For example, in 1990, the housing in Boston's central city was, on average, 51 years old, compared with 34 years in the suburbs. In Chicago's central city, housing was, on average, 46 years old, compared with 24 years in the suburbs (Kasarda, Appold, Sweeney, and Sieff 1997, 315). Given the age and condition of central-city housing,

it is not surprising that newly prosperous postwar households were attracted to homes that were bigger and better.

The federal highway program was created in 1956 to build a limited access, high-speed interstate highway system to link America's cities. Criticism on the grounds that it was depleting the cities emerged in the system's earliest days, even when only a fraction of today's network was completed. However, this theory gets little support from the facts.

Most older American cities hit their population peaks in 1950 and declined steadily through the decades that followed. The decline was underway even before the interstate

highway program became law in 1956. By 1960, when all the older Eastern cities were losing population and suburban development was well underway, only 5,135 miles of the planned 41,000 miles of the interstate highway system were completed, mostly in rural areas (US DOT 1999). Indeed, it was not until the 1980s that residents in many older cities had convenient access to interstate highways.

By then, however, the process of urban decline and suburban growth was far along, and the segments to or through the cities had very little influence on the patterns of suburban development that followed. For example, Philadelphia's suburbs grew steadily through the postwar era, even though Interstate 95 terminated five miles southwest of the city line until the 1980s. When completed, the interstate route

The decline in older American cities was underway even before the interstate highway program became law in 1956. By 1960 only 5,135 miles of the planned 41,000 miles had been built, mostly in rural areas.

traveled past suburban communities whose existence predated World War II. In fact, their location and the stubborn resistance of their residents were among the major obstacles to the completion of the highway to the city.

As the postwar evidence suggests, the patterns of suburban development in communities across the country bear little or no relationship to the presence of federal highways or federal housing policy. Rather, these patterns were influenced largely by a growing population and to a lesser extent by the decline in the quality of life and public services and the aging housing stock characteristic of most older communities.

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Ronald D. Utt, a Senior Fellow with the Heritage Foundation, is coeditor with Jane S. Shaw of A Guide to Smart Growth: Shattering Myths and Providing Solutions (Washington, DC: Heritage Foundation, 2000). This article is excerpted from his chapter, "The Federal Role in Smart Growth."

#### AN ALTERNATIVE TO NEW URBANISM

# THE NEW SUBURBANISM

By Donald R. Leal

The suburbs are popularly identified with monotony—with "cookie-cutter" homes and streets and intersections designed for the automobile rather than the pedestrian. In addition, they have large paved areas and extensive utilities, which require costly maintenance and grow unsightly with age.

One way to address these flaws has been a new style of community called "traditional neighborhood developments," or TNDs. These communities are designed to reflect the style and patterns of development that existed in many small towns during the first half of the twentieth century. Such towns had tiny lots with homes close to one another; narrow streets that connected to form a grid pattern of roadways; commercial uses intermingled with residential uses; and virtually everything necessary for typical living—stores, churches, schools, homes, and jobs—within walking distance.

#### **NEW SUBURBANISM**

Traditional neighborhood developments, part of the "new urbanist" vision, are not likely to be widely adopted, however. For one thing, it is difficult to create an economically viable commercial town center when you discourage automotive use, as proponents of these designs do. And while many environmentalists embrace the compactness of TNDs as a way to save open space, TNDs often require as much as twenty percent more linear feet of paved road than conventional developments because of their alleys and collector streets (Harrison, 4). The Environmental Protection Agency considers paved roads a major contributor to deteriorating water quality.

The biggest challenge for traditional neighborhood developments is affordability. Higher design and construction costs and the costs of common-area infrastructure result in more expensive homes (Steuteville 1999, 12).

Two new designs for suburban developments offer a way to add distinction to suburban living while keeping it affordable. Designed by landscape architect Rick Harrison, they offer more open space, less costly roads and utilities, safer travel, and greater variety than traditional suburbs within the price range of a large number of potential homebuyers.

onventional developments position homes parallel to the street, with specified and uniform setbacks (the distance from the street curb to home front). The problem with this placement is that building enough houses to achieve affordable density means building more paved road. Coving is a site-planning method that creates coves of green space in front of houses through varied setbacks and winding streets (see figure).

Coving removes the assumption that homes must be parallel to the street. Homes are positioned to form a curve that is separate from the pattern of the streets, allowing more homes for a given length of road. Compared to conventional layout, coving reduces the linear feet of street by an average of 20 percent, sometimes as much as 40 percent.

Because home and street positions are not as rigid as they are with either conventional suburban developments or TNDs, they can conform more closely to the natural topography. So, while housing density generally remains the same as with a conventional layout, there is more open space adjacent to homes, and walking paths can follow a curvilinear route independent of the street. The combination of open space and independent walking paths increases beauty and safety at less cost, says coving's inventor, site planner Rick Harrison (Bady 1999, 24).

Coving is appealing for a variety of reasons. It increases lot size by 15 to 20 percent without sacrificing the number of houses that can be built at a site. In effect, the extra land that is spared from use as roads is placed into front yards. Coving cuts maintenance costs for cities and reduces runoff and ero-

sion to maintain water quality. And it allows houses to be positioned individually on lots so they don't face each other. Not only does this enhance individuality among home sites, it adds privacy.

Coving makes natural amenities more accessible because open space is interwoven with housing. And it provides visual appeal without the expensive architecture or landscaping necessary for successful "new urbanist" designs. With coving, homes are more affordable. Furthermore, unlike government-prescribed setbacks, coving allows the distance from the street curb to the home fronts to be increased sufficiently to make even a modestly priced home

appear estate-like.

A more recent site planning method by Rick Harrison is the bay home concept (see figure). Like coving, the bay home concept uses less infrastructure than conventional designs.

While a coved development is based primarily on single family ownership, with bay homes the land and all items outside the house are held in common through a homeowners' association. Without the constraints of individually owned lots, bay home layouts can achieve even greater savings in infrastructure than coving.

Most bay home units front other units without having a dedicated street between the fronts. Instead, meandering walkways connect the fronts, creating a pedestrian-oriented community. Unlike coved developments, bay home units have an entrance and garage in the rear of the home, while the front entrance faces open space. Bay home units also have inviting

Coving and bay homes

offer variety and

distinction at a more

affordable price than new

urbanist "traditional

neighborhood

developments."

#### Coving Site Design

#### Bay Home Site Design



Coving (left) reduces the land needed for paved roads and infrastructure. The bay home design (right) reduces roads even further by relying more on walkways.

open porches to create a more neighborly environment (Rick Harrison Site Design Inc., 7–8).

While the bay home concept has strong similarities with the traditional neighborhood design, including high densities, there are differences. Compared with the rigid grid pattern of streets of TNDs, bay home development cuts infrastructure by about 50 percent while creating a safer, pedestrian-oriented environment. Because bay home developments do not require expensive architecture, they can accommodate moderately priced units, including units in inner-city renewal developments.

The prospects appear bright for both coving and bay homes. By December 1999, three coved developments had been completed, 40 were under construction, and over 50 were in the approval process. The first bay home project was recently approved in Minnesota, and five more are in the approval process.

There are stumbling blocks, such as rigid restrictions on setbacks and streets and the approval process itself. However, for communities where zoning and planning is forward-looking, designs such as these offer promising alternatives.

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Donald R. Leal is a Senior Associate of PERC. This article was excerpted from his chapter, "The Market Responds to Smart Growth," in A Guide to Smart Growth: Shattering Myths and Providing Solutions, ed. Jane S. Shaw and Ronald D. Utt. (Washington, DC: Heritage Foundation, 2000).

## REFORMING THE ZONING LAWS

#### By Samuel R. Staley

echnology is radically changing the concept of the city and the role of geography in residential and commercial location. Yet modern planning often relies on master plans—rarely updated that presume to predict and control future land-use patterns. Once land uses are established by ordinance in the zoning map, and deviations

from the zoning map must be approved by planning commissions and city councils, innovation becomes an uphill battle.

The alternative to the present rigid top-down system is market-oriented planning. Market-oriented planning retools the approval and rezoning process to respond to consumer preferences while protecting the interests of neighbors and community residents. Several strategies are outlined below.

Strategy 1: Facilitate market trends; don't hinder them. Markets force developers to respond swiftly to consumer preferences. They find out quickly, for example, whether consumers want high- or low-density and how much open space is attractive. Planners' tools should allow such preferences to be adopted.

- "As of Right" Development. Under this doctrine, attempts to change land uses are automatically protected unless the planning board or local legislative body takes explicit action to hold up approval. Developers should be required to notify neighbors and others directly affected by their proposed projects so that any harms or potential spillover effects can be addressed specifically.
- Overlay Zoning Districts. An overlay is a regulation (e.g. a code or zoning district) that, under specific situations, supersedes the underlying

Modern planning often relies on master plans rarely updated—that presume to predict and control future

on pages 5-7). land-use patterns. Mixed-Use Zoning. Defining zones broadly to accommodate more than one

regulation. An overlay might allow

for deviations from standard densi-

ties under certain circumstances or

allow innovations such as neotradi-

tional development or coving that

conventional zoning codes would

prohibit (see discussion of coving

 Market-Determined Densities. Communities should ties. "Performance zoning," for example, might establish standards for design elements such as the amount of open space but would not spell out how these standards must be met.

use will allow communities to change and evolve. allow consumers to determine appropriate densi-

Strategy 2: Make nuisance and third-party harm the focus of planning and development review. The original intent of zoning was to protect neighbors against development that could reduce property values by imposing harms. However, the open-ended nature of today's approval process creates substantial uncertainties and delays and a bargaining environment in which any concerns can be raised, regardless of actual impact. The negative impacts of property development should be demonstrable before restrictions are imposed, and developers should be given the opportunity to correct for these impacts.

Nuisance Standards for Approval. The traditional common law principle of nuisance should be the standard for government regulation of private activity. Neighbors would have standing to insist on mitigation of or compensation for clearly substantiated damages resulting from the development.

- Minimized Role of Aesthetics. The impacts of spillover effects tend to be very local, affecting close neighbors rather than entire neighborhoods or communities. Thus regulatory control should be focused on the impacts of individual development proposals and projects rather than broad citywide regulation. Aesthetic issues are so intangible that they cannot be handled objectively through the planning process.
- Preapplication Meetings. Early meetings with planning staff can identify problems before significant resources have been invested in a project.

Strategy 3: Adopt administrative rather than legislative reviews of development applications. Legislative review forces local governments into case-by-case reviews of projects irrespective of their impact. Minor changes end up being subjected to the same approval processes as large, integrated, mixed-use developments. This slows land redevelopment and subjects projects to an often arbitrary and unpredictable approval process.

- Limitations on Standing. Public hearings should be used primarily to disclose tangible, measurable spillover impacts so they can be addressed. The current approval system gives standing to anyone within the community to comment, delay, or object to a proposal, regardless of the project's actual effects.
- Administrative Site-Plan Review. In most cases an administrative review process, rather than legislative review, can evaluate a project. Clearly defined criteria for what is acceptable can be coupled with performance bonuses to encourage the inclusion of specific characteristics such as landscaped buffers between roads and buildings.
- One-Stop Shop for Planning and Permit Approvals.
   One-stop permit processing streamlines the process. This is especially important for small and less-experienced developers.
- A Supermajority. While local governments should provide an appeal process, a supermajority should be required for city councils to override planning board decisions. This requirement would build certainty in the process and strengthen the ability of planning boards to mediate between affected parties.

Strategy 4: Align Costs with Property Development. Property owners and developers should bear the full costs of property development. Local communities should not be expected to subsidize property development by extending sewers, roads, and other infrastructure to the site without charging property owners and developers the full cost of these improvements. Nor should new residents be expected to subsidize existing residents by paying fees in excess of their true cost, as sometimes happens when impact fees are imposed.

- Developer Payment for On-Site Infrastructure. Private developers should pay the full financial burden of extending sewer lines, roads, and other utilities to their property, using materials and technology consistent with the existing infrastructure and their own development needs.
- Full-Cost Pricing for Infrastructure. An alternative to on-site provision of infrastructure is full-cost pricing when the public sector builds the infrastructure. The developer should be charged all costs—operating, maintenance, capital costs, and debt service—for the provision of water, sewer, and other utilities that serve the development.
- Public Planning for Future Infrastructure. State and local governments typically make long-term investments in roads, sewers, and water systems with little consideration of the impacts on land development and the real-estate market or regional planning. They should be required to plan the location of infrastructure and secure the necessary rights of way and easements before private development takes place. Actual construction would be triggered by development patterns and private-sector investment thresholds and tied to specific performance measures.

By working with the dynamic nature of the real estate market, planning can be retooled to ensure more efficient land use, to facilitate the evolution of local communities, and to strengthen their long-term economic viability.

Samuel R. Staley is Director of the Urban Futures Program at the Reason Public Policy Institute, a nonprofit research and education organization based in Los Angeles. This essay is adapted from "Reforming the Zoning Laws" in A Guide to Smart Growth: Shattering Myths and Providing Solutions, ed. Jane S. Shaw and Ronald D. Utt (Washington, DC: Heritage Foundation, 2000).



By Linda E. Platts

#### MIMICKING MOTHER NATURE

From Bali to Las Vegas, a new method for treating wastewater is producing clean water as well as lush gardens. Designed by environmental engineers John and Nancy Todd, the Living Machine is a network of miniature environments that mimics natural biological processes to clean wastewater. While similar to the cleansing done by river and estuary ecosystems, the new technology works faster and more intensely for industrial applications.

The wastewater passes through a series of tanks stocked with microorganisms, plants, snails and fish that clean it without using any chemicals. As the water becomes cleaner, it flows from closed tanks to open ones that resemble marshes filled with wetland plants, snails, clams, and fish. These tanks are located in a greenhouse where sunlight powers the plants and the cleaning process continues.

At the end of the cycle, the water can be safely discharged or reused. The solid wastes are composted and used in gardens. The Living Machine is less expensive to install than a conventional wastewater treatment system and less costly to operate. It also has the advantage of looking like a lush garden and is completely free of foul odors.

—Time Magazine

#### SOYBEANS IN THE TRUNK

Tractor parts made from soybeans and picnic tables made from the kenaf plant are just a few of the products that use natural fibers to replace more conventional materials. They are proving to be more durable, lighter in weight, and priced right.

For example, both Ford Cougars and Mustangs

are being outfitted with door panels and trunk liners made from a composite of kenaf-fiber and polypropylene plastic. John Deere and Co. is using soy-based fiberglass composites in its tractors and haybalers.

Manufacturers say that many of these natural fibers weigh 30 percent less than wood and are easier to work with, thus speeding up the manufacturing process. The fibers are chopped, blended with molten plastic, and then shaped in molds to create everything from tables to shipping pallets. The molding eliminates the waste that normally is produced when wood products are trimmed. The materials can also be melted down and reused up to five times.

Global Resources Technologies in Madison, Wis., is using jute, sisal, coir, flax, kenaf and even denim in a host of products. Denim scraps from the nearby Lands' End clothing company go into composite pallets that are stronger than wood. While the initial cost can be higher than wood, the company says the composite variety can withstand 100 trips, while wood pallets typically breakdown after three trips.

—Christian Science Monitor

#### DOWN WITH DIKES

F or years, dikes have held back the salty waters at Long Beach, Washington, to create pastureland for horses and cattle. Now the tide has turned, and the dikes are coming down to create high quality intertidal wetlands.

John McHugh is tearing down a 60-year-old dike on his property and restoring eight acres of wetlands for commercial purposes. He is creating a wetland bank where developers, including state agencies, can buy credits for mitigation purposes.

Previously, developers had to provide on-site mitigation, which was rarely successful at replacing

the value and function of the lost wetlands. By consolidating restoration efforts on a single, larger tract of land, rather than attempting numerous, smaller projects, McHugh will be able to create an intertidal salt marsh of the highest quality. The new marsh will provide habitat for fish, other aquatic life, and waterfowl, as well as act effectively as a natural filter.

This is the first privately owned wetland mitigation bank in Washington. It is funded in part by the Shorebank Pacific Enterprise Group, a nonprofit environmental development organization, which supports the project because it is both "pro-development and pro-restoration."

With the first project looking profitable, there is a high probability that other private interests will become involved in restoring wetlands in the state. McHugh is already working on plans to restore 60 more acres of diked tidelands.

—Tidepool News Service

#### SAVING THE SISSEROU

A small group of scientists and philanthropists have personally contributed enough money to finalize the creation of a bioreserve on the Caribbean island of Dominica. The reserve is home to the Sisserou, the world's rarest Amazon parrot and the national bird of Dominica. Only 200 of these parrots are believed to exist.

Led by Dr. Paul Reillo, the director of the Rare Species Conservatory Foundation in Loxahatchee, Fla., conservation biologists, private individuals and foundations raised \$439,000. An additional \$311,000 came from the foundation's operational funds and a mortgage on its property as well as Reillo's personal savings. These funds along with \$366,000 from the Dominican government were used to purchase the last remaining tract of private land needed to complete the reserve.

Since its independence in 1978, the Dominican government has worked hard to protect its natural resources. It has established two national parks and the new bioreserve on the slopes of Morne Diablotin, an extinct volcano, will become the third. Most of Dominica is covered by pristine rain forest and is often referred to as the "nature island." It has more than 365 rivers, dozens of waterfalls, and an abundance of endemic species.

Reillo, who has conducted extensive research on the island, says the financial risk both personally and for the foundation was justified. "Everybody can help save the world's natural heritage. The trick is making sure funds leave permanent conservation footprints, such as protected areas."

—Environmental News Service

#### MUCK FARM TO ECO-RESORT

The transition from muck farm to nature-based resort has been a rocky road for Florida's St. Johns River Water Management District. Despite the rough patches, the resort is in full swing today offering visitors a glimpse of a Florida marsh and its wildlife, while returning profits to the agency.

The road to nature tourism began when the water district bought Ocklawaha Farms southeast of Ocala, a 2,600-acre tract of land that had been supplying compost for more than 70 years. Most of the acreage was restored to marshland, but some of the higher ground and accompanying buildings presented a profit-making opportunity. Both Pew Charitable Trusts and the Audubon Society tried their hand at creating a nature-based resort, but it took a professional hotelier to get the project off the ground.

Stanley Selengut, who runs several renowned eco-resorts in the U.S. Virgin Islands, was scouting for property on the U.S. mainland when he stumbled on the struggling resort. Last year, he leased 52 acres of land with a renovated lodge, some guest cabins, and a swimming pool from the water district.

Since then, he has continued to add more cabins, eco-tents, which are more informal accommodations, and a restaurant. Guests enjoy activities from canoe and kayak trips to natural history programs. They can explore the local waters, hike an extensive trail system, and view wildlife that includes river otters, sandhill cranes, and Florida black bear and bobtail wildcat.

A first-rate nature experience in a full-service resort costs visitors just \$125 per night in high season. The water district gets \$42,000 a year in lease payments from Selengut and as more guest cabins are added, the lease payments will increase. Selengut is already tinkering with expansion plans, and the water district is optimistic as well. Robert Christianson, director of the district's operations and land resources, is looking for other water district sites that are suitable for profit-making partnerships.

— Jacksonville Florida Times-Union

#### PRESIDENT CLINTON'S BID FOR WILDERNESS

# END OF THE ROAD?

By Shannon Fitzsimmons

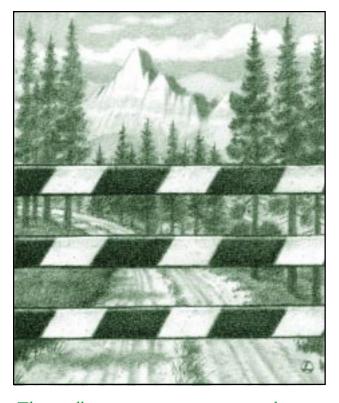
L aws can be repealed without Congress doing a thing. The president's "roadless initiative," which would ban road construction in over 43 million acres of national forest, is the latest step in the gradual repeal of the laws governing the Forest Service.

Traditionally, the Forest Service had a goal of producing timber, but also coordinating "outdoor recreation, range, timber, watershed, wildlife and fish and wilderness" [16 U.S.C. 1600 Sec. 6(e)(1)]. This mandate has been virtually replaced by a new vision that stresses setting land aside so that it is largely untouched by human beings. As the Forest Service (1999) now states, its goal is to create "a new vision by making sustainability the

foundation for planning and decision making."

The change reflects a president eager for an environmental legacy, an acquiescent Congress, and—perhaps most important—a long-time shift in lobbying power between environmentalists and the timber industry.

President Clinton's 1999 directive has just been issued as a proposed Forest Service rule. It applies to about 22 percent of the nation's federally owned forests and has three parts. The first prohibits road reconstruction and construction on the 43 million



The roadless initiative is a sweeping directive that makes drastic changes without congressional approval.

acres. The second guides forest supervisors in identifying additional smaller roadless areas and managing them in accordance with the new vision. The third deals with Alaska's Tongass National Forest separately. There is no way to know how much land the second portion of the initiative will affect. But alone, the 43 million acres are more than a fifth of our total national forests—an area larger than the state of Washington.

There are other signs of metamorphosis in Forest Service philosophy, too. For example, a proposed road management policy would manage the existing road system along the lines of the same vision. Several major national forests, including Colorado's White River National Forest, are revising their forest plans. The pro-

cess is bitterly contentious as it reflects a broad proposed planning rule that places ecological sustainability above economic or social uses (Forest Service 1999).

This new vision of highly restricted use is not limited to the Forest Service. Using the Antiquities Act of 1906, President Clinton has declared five national monuments and has plans to create more. This is comparable to creating national parks by simply announcing them. The most notable designation is

Utah's new 1.9 million-acre Grand Staircase Escalante National Monument, (weighing in at just under Yellowstone National Park at 2.2 million acres), and the most recent is California's Giant Sequoia National Monument. The Clinton administration is eyeing Idaho's Great Rift near the already existing Craters of the Moon National Monument, Montana's Missouri Breaks, and the Steens Mountain area of Oregon, among other areas, for further national monument designations. In a *High Country News* column (April 4, 2000), Rochelle Oxarango lamented the undemocratic spirit of these designations: "King William had sent his knight in flying armor, Secretary of Interior Bruce Babbitt, on another crusade to claim a chunk of the West."

aringly, each sweeping directive makes drastic changes without congressional approval. By

law, Congress alone can designate wilderness; the executive branch only has the authority to identify and recommend it. According to the Wilderness Act [16 U.S.C. 1121 Sec. 2(c)], wilderness is "an area where earth and its community of life are untrammeled by man. . . without permanent improvements or human habitation." By prohibiting roads, the roadless initiative creates de facto wilderness area. Forest Service Chief Mike Dombeck said as much when he stated that "the last vestiges of wilderness, the roadless areas, hang in the balance" (Subcommittee on Forests and Public Lands Management 1999).

The Forest Service already manages 34.75 million acres of congressionally designated wilderness—roughly one third of the national total. The roadless initiative will more than *double* the amount of national forest land devoted to wilderness use. Even though the rule does not prohibit mining or logging, realistically, without road access they might as well be banned.

While the president seems to be ensuring his administration's environmental legacy, the philosophical change has been a long time in the making—reflecting an evolution of the players who affect the public land agencies. Long an agency that worked closely with the timber industry, the Forest Service now caters to the agenda of wilderness advocates.

In a shift often referred to as "the greening of the Forest Service," demographics at the agency have changed. In his book on American environmentalism Mark Dowie (1995, 178) notes that when President Clinton took office, "about two dozen environmentalists were hired directly from national environmental organizations and salted strategically throughout the new administration." He quotes National Audubon Society lobbyist Brock Evans: "I can't tell you how wonderful it is to walk down the hall of the White House or a government agency and be greeted by your first name" (179). Forest economist Roger Sedio (1998, 7) says that the Forest Service culture has changed "as staff trained in traditional forestry has been supplemented with those trained in wildlife ecology and the biological sciences."

Further evidence of the shift is the fact that

even though the initiative would all but prohibit logging on the 43 million acres, the timber industry "has been remarkably quiet" (Williams 2000, 90). The reason? National forests have been dwindling as a source for timber.

Policies like the 1964 Wilderness Act and the 1973 Endangered Species Act have made large chunks of federal land unavailable for timber. (The Northwest Forest Plan set aside 24 million acres for the northern spotted owl in 1994.) National forests provided 18 percent of the total volume of timber harvested in the United States as recently as 1991, but only 5 per-

cent in 1999. In recent years, more and more federal land has been made off-limits to logging. All too aware of this trend, the timber industry was surprised by the magnitude, not the goal, of the roadless policy.

Large corporations have shifted from logging on national forests to private land. Boise Cascade Corporation pointed out in its 1999 annual report that "with less government-owned timber available than in years past, we meet an important share of our raw material needs with the 2.3 million acres of timberland we own or control."

Meanwhile, smaller members of the forest products community, like independent mills and roundwood producers, have gone out of business. The surviving firms generally do not have the resources

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#### END OF THE ROAD?

needed to seriously challenge federal policy. "Since the listing of the northern spotted owl, 36 mills in my district alone have been forced to close their doors," said California representative Wally Herger (Subcommittee on Forest and Forest Health 1998) in congressional testimony.

of course, some groups are putting up a fight. In fact, small coalitions unhappy about federal programs are springing up throughout the West. In a May 1996 High Country News article, Lisa Jones reported: "Coalitions of environmentalists, ranchers, county commissioners, government officials, loggers, skiers and jeepers are popping up as often as wood ticks across the western landscape."

Western governors, who must balance the interests of a wide variety of groups, have attempted to carry this voice to the national level, but not very successfully. The state of Idaho sued the federal government over the roadless initiative, complaining that the Forest Service violated the National Environmental Policy Act. The suit claimed that the Forest Service kept maps of affected areas—as much as 8 million acres—and other information from the public during the initial comment period. The court dismissed the case as not being sufficiently "ripe." And eleven western governors wrote to the president in February, requesting cooperative agency status in formulating the rule. They were ignored.

In contrast to state governors, Congress has authority to take action. The roadless initiative is an executive act. Yet prohibiting access to roughly one quarter of our national forests, the roadless initiative represents a major departure from the traditional uses of executive authority. Over 350,000 written comments were received by the Forest Service during a six-week comment period on the draft rule. But because the initiative is a presidential directive, the rule need not even address these comments.

Political scientists William J. Olson and Alan Woll (1999, 22) have observed that throughout the twentieth century, "presidential power has too often rushed down in a single torrent." They urge that "Congress, the states, and the courts" perform their duties. Congress has yet to follow this advice. The idea of protecting roadless areas has a powerful environmental image and thus strong public support, even though significant evidence suggests that such extreme levels of preservation may be detrimental to forest health and safety (Fretwell 1999). Still, the

anti-environmental stigma is persuasive disincentive to act.

Since it is not a law, the initiative could be overturned by either the courts or a future presidential administration. So its fate is uncertain. This uncertainty leaves the Forest Service in limbo, operating without codified policy. Said Zane Smith in a Eugene, Oregon, newspaper, (*Register-Guard*, November 23, 1999): "Local officials are left to twist in the wind while their superiors ignore the reality of conflicting values and objectives shared by the citizens who own the national forests."

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Shannon Fitzsimmons is an intern with PERC. She was recently a member of the Dillon Ranger District trail crew on the White River National Forest.

### WHERE RESEARCH AND POLICY MEET

### TANGENTS

By Daniel K. Benjamin

**economist**, n. a scoundrel whose faulty vision sees things as they are, not as they ought to be.

—after Ambrose Bierce

Pollution comes in many forms. One of the most ubiquitous is noise—from truck and automobile traffic, neighbors' stereos, barking dogs, and for some people, takeoffs and landings of commercial aircraft. So far, the federal government hasn't sought to regulate the decibel output of Metallica or Fido, but it does restrict the noise that airplanes may generate.

Given the racket that people raise over airport noise, one would think that the social benefits of

regulating airport noise must be great. In fact, they are not. According to recent research by Steven A. Morrison, Clifford Winston, and Tara Watson (1999), regulating airplane noise has cost \$10 billion—twice as much as the most generous estimate of the benefits.

Internal combustion generates noise, and the combustion needed to get a loaded 727 off the ground is considerable. In the early 1970s, prompted by homeowner complaints of noise near airports, Congress gave the Federal Aviation Administration (FAA) authority to

set noise standards for new airplane designs. In 1977 the FAA designated three stages of aircraft, judged by their noise levels. For example, the Boeing 707 is a Stage I aircraft—the noisiest; the Boeing 727 and DC-9 are somewhat quieter Stage II planes; and the Boeing 767 is a relatively muted Stage III aircraft.

The agency also established deadlines for meeting the second-stage noise requirements. This process was abruptly accelerated by the 1990 Airport Noise and Capacity Act (ANCA), which mandated the

complete elimination of even Stage II aircraft from all U.S. airports by the end of 1999.

Airplane noise tends to reduce the value of land located in the flight paths around airports. By cutting noise, ANCA has generated benefits—higher land values—for homeowners in areas affected by aircraft. But the law also has generated costs for airlines and their customers. In effect, ANCA shortened the useful life of planes flying into U.S. airports: Airlines ei-

ther had to replace Stage II aircraft with quieter ones far sooner than they would have, or they had to retrofit the planes with expensive "hush kits" that could meet the Stage III noise standards. Airlines have chosen a mix of strategies, depending on the routes they fly and the vintages of the Stage II airplanes they owned.

When ANCA was passed, fully 55 percent of the U.S. fleet was comprised of Stage II aircraft. As I write, all of these planes either have been scrapped, sold to foreign airlines at substantially discounted

prices, or retrofitted with hush kits. The cost of meeting the ANCA Stage III noise requirements for these planes has been \$10 billion—the equivalent of about \$700 million per year forever, or about \$1 for each passenger enplanement every year.

There is an extensive literature on the effects of noise on property values. The authors draw on this literature to estimate that the ANCA rules have raised property values near airports by at most about 5 percent, or about \$5 billion. So, the net effect of

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#### **TANGENTS**

ANCA—costs minus benefits—has been to destroy \$5 billion worth of resources.

The authors go on to ask and answer another intriguing question: Even though Congress got it wrong with ANCA, how much could we have benefited if Congress had done things right? An economically sensible policy would have hit airplane noise with taxes as great as the damage done to nearby homeowners; or it would have established noise permits that took into account both the benefits and costs of noise reduction. Such a policy would have been far less costly than ANCA, turning a multi-billion dollar social loss into about \$15 million per year in net benefits.

Even so, \$15 million per year is only about two cents per passenger enplanement. Why are the potential benefits from government noise regulation so low? The answer is quite simple: Because people are free to live where they wish, they sort themselves according to their preferences. Thus, people for whom noise would be the most costly simply don't live around airports and other noise generators. In contrast, noise lovers congregate not only at rock concerts; they also live in major flight paths, relatively unconcerned with the roar of passing jets. And because the sounds are of less concern to them, the ben-

efits of government policies to reduce those sounds are small relative to the costs.

The good news, then, is that had the market been left alone, it would have produced an outcome vastly superior to that produced by social regulation. Free to choose, individual market participants would have almost completely eliminated the potential net losses from airport noise pollution. The bad news is that Congress didn't get the message, and its choices have wasted \$5 billion worth of our scarce resources—by compelling air travelers to provide homeowners near airports with a level of quiet that is worth only a fraction of its cost.

Another way to think of this is that every time you get on a plane, you are throwing away a buck so that nearby homeowners can enjoy 50 cents worth of the quiet life. And what happens to the other half of the dollar? It gets lost in the noise.

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Daniel K. Benjamin is a PERC Senior Associate and Professor of Economics at Clemson University. "Tangents" investigates policy implications of recent academic research.



"Federal Land Exchanges: Let's End the Barter," by **Tim Fitzgerald**, is a new *PERC Policy Series* paper that offers a practical way to reform the costly and time-wasting federal land exchange process. Fitzgerald recommends allowing agencies such as the Forest Service and the Bureau of Land Management to buy and sell federal land.

Land exchanges are used by government agencies to reconfigure scattered land holdings. Such fragmentation, a legacy of past government land policies,

makes management difficult and access sometimes impossible. While land exchanges have a valuable purpose, they are cumbersome and time-consuming and frequently criticized for not being fair trades. Many useful trades are never completed.

The paper scrutinizes the land exchange program and shows how markets can correct many of its problems. The author is a former research assistant with PERC who currently makes his living as a guide and outfitter in Colorado. Copies of the paper (PS-

18) are available from PERC, and the paper is available in its entirety (as a PDF) on PERC's Web site, www.perc.org.

PERC has launched a new series of studies. These papers, written by PERC fellows, associates, and colleagues, are designed to give scholars and policy anabackground for understanding todav's environmental policy issues. More academic than our PERC Policy Series papers, these studies illustrate our ongoing commitment to high-quality, policy-relevant research.

Pierre Desrochers' paper, "Eco-Industrial Parks:

The Case for Private Planning," punctures some myths about what needed to persuade companies to turn the waste of one into the resource of another. Desrochers is a senior research fellow at the Institute for Policy Study at Johns Hopkins University. He received his Ph.D. in geography from the University of Montreal in January 2000. He received a Mitchell Young Scholar Prize Award from the Houston Advanced Research Center for a paper on resource recovery. He wrote "Eco-

Industrial Parks: The Case for Private Planning" as a graduate fellow at PERC during the summer of 1999 and was named PERC's 1999 William S. Broadbent Fellow in recognition of the quality of his work.

Three of the articles in this issue of PERC Reports come from the new book A Guide to Smart Growth: Shattering Myths, Providing Solutions, edited by Jane S. Shaw and Ronald D. Utt, published jointly by the Heritage Foundation and PERC. Said former Senator Malcolm Wallop of the work, "This splendid little book is a cogent examination of the history and consequences of the search for space, air, views, schools and safety that has resulted in suburbanization." Featuring contributions from policy analysts and scholars, the book is a collective invitation to think more expansively about suburban growth. It can be ordered online at http://www.heritage.org/bookstore or by contacting the Heritage Foundation, Publications Office, 214 Massachusetts Avenue NE, Washington DC 20002 (800-544-4843).

As Congress gears up to add more land to the federal estate in the name of conservation, PERC is pointing out that the condition of lands already under federal control is in sad decline. "If we are to protect America's most valued lands, federal land management policies must be reformed and private

> conservation efforts encouraged," says PERC researcher Holly Lippke Fretwell in her new report on public lands, "Federal Estate: Is Bigger Better?"

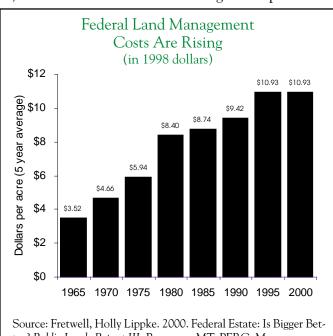
> One-third of the land area of the United States is under federal control and expanding at a rate of more than 800,000 acres per year. If the Conservation and Reinvestment Act (CARA, S.25), devoted to enabling land acquisitions, is passed, the federal estate will increase even more rapidly. And, says Fretwell, "Increasing the size of the federal es-

tate does not come cheap." (See figure.)

Yet entrusting land to federal hands in no way ensures conservation. If management needs are not met, greater degradation of that land is often the result. Current acquisition bids provide no funds for management.

Thus, says the report, to protect valuable federal lands, managers must have the freedom to address economic realities rather than kowtowing to Congress for their budgets. The report offers flexible management strategies that address the varied character of federal land. And it explores incentives such as tax benefits and conservation easements that would facilitate private conservation.

This report is the third in the PERC series on Public Lands. The paper is available (as a PDF) at www.perc.org.



ter? Public Lands Report III. Bozeman, MT: PERC, May.

## letters to the editor

#### REACTIONS

502 S. 19th Avenue, Suite 211 Bozeman, Montana 59718

#### Bast Chides Huber

Peter Huber's response to my comments on his new book, *Hard Green* ("Chew Your Beef," March 2000) is disheartening for anyone who supports free market environmentalism.

If we look past the colorful rhetoric, Huber is telling us that his primary objective in writing *Hard Green* was to describe a kind of environmentalism

that will attract broad support. He doesn't believe that calling for private ownership of Yellowstone or the Grand Canyon fits the bill.

I have three problems with this position. Huber doesn't just sympathize with the public's interest in wilderness preservation; he puts forth an embarrassingly thin rationale for public ownership of wilderness. If acted on, his policy would lead to a net loss

of private property, in spite of his insistence that government ownership is to be viewed as a last resort.

Second, Huber doesn't just stop short of following free-market ideas to their logical end; he specifically and repeatedly contradicts and disparages them.

Third, I and other libertarians writing on environmental issues do not speak for "the new right," and our consistency does not place us to the right of Huber. On almost every issue, we are closer to mainstream American thinking than is the anti-business and anti-science faction of the environmental movement.

If Huber is sincere about wanting to read "Bast's [Grand] Canyon Privatization Plan," I suggest he

read my 1996 book, Eco-Sanity: A Common-Sense Guide to Environmentalism, where public versus private ownership of wilderness land is discussed at length—and, I might venture, in terms more likely to win over "the man in the Winnebago" than is Huber's pandering rhetoric.

Joseph L. Bast, President The Heartland Institute Chicago, IL

Editor's Note: The initial exchange between Bast and Huber can be found on our Web site at http://www.perc.org/mar00.pdf.

#### Eidsmoe Chides Bast

Your March PERC Reports is, as usual, very interesting, even though I have difficulty with some of the approaches to the environment. But that is why I read it.

"Hard to Swallow," Joseph Bast's critique of Peter Huber's *Hard Green* was, in turn, hard to swallow. He commented that

the "markets do a fine job meeting the demand for classical music, abstract art, Beanie Babies and Pokémon trading cards"—hence, markets can produce sufficient supplies of wilderness and wildlife. What nonsense. I will concede markets that are okay for Beanie Babies and Pokémon trading cards, but if left to the markets there would be no oldgrowth natural forests left. And if the markets provide me with classical music, why in the city of Phoenix, with a metropolitan population of 3,000,000 and about 25 radio stations, the only one on which I can get classical music is National Public Radio?

Robert R. Eidsmoe Rio Verde, AZ

#### Another View of Emissions Trading

Some time ago ("Tangents," February 1999) Senior Associate Dan Benjamin described an article in the September 1998 issue of the *American Economic Review* (Joskow, Schmalensee, and Bailey 1998). The authors claim that the market for sulfur dioxide allowances is a successful experiment.

I am less sure. Indeed, the sulfur dioxide trading system is sufficiently flawed that its principal supporter, Environmental Defense, recommends that

emissions trading not be used for carbon dioxide reductions under the Kyoto Climate Change Protocol. It recommends instead a system of taxes and tax credits. Moreover, the Environmental Protection Agency is now promoting an extensive commandand-control system for oxides of nitrogen. In 1990, when the Clean Air Act Amendments were adopted by Congress, oxides of nitrogen emissions were to be traded along side of sulfur dioxide emissions.

As I have pointed out in Regulation magazine in 1991, 1994, and 1998, emissions trading under the Clean Air Act and the RECLAIM system in Southern California have serious flaws. I believe the most serious is the denial of property rights

status for the allowances and the credits that are to be traded. This was done in order to avoid liability for a "taking" under the Fifth Amendment of the Constitution if the government alters or eliminates the trading system.

Regrettably, this deficiency is not even mentioned in most of the academic journal articles, including the one in the American Economic Review. However, it explains why three-fourths of the trades from March 1994 to March 1997, according to the EPA, were dealings within each utility's corporate structure. This is where property rights and other contract obligations are more likely to be enforced. But even this is no guarantee that the whole system will not be altered substantially, with the utilities left holding the bag. Therefore, electric utilities are going to depend on alternative strategies where property rights are well defined. These include actually reducing emissions, buying electricity instead of allowances, buying the more liquid natural gas futures, and stockpiling low-sulfur coal.

The lack of property rights status may also be playing a role in depressing the prices of the allowances and credits. After peaking at \$210 per ton in March 1999, sulfur dioxide allowance prices steadily declined to \$136 in March 2000. This price behavior is not consistent with the start of Phase II this year, when required sulfur dioxide reductions will be 10 million tons compared with 3.5 million tons in Phase I. It is consistent with a desire merely to create precautionary stocks of allowances. We can expect future purchases of allowances to be primarily for replacing

stocks used during a crisis. With the availability of the substitutes mentioned above, we should see flat or declining prices and quantities traded, if my view is correct.

Another supposed improvement with the sulfur dioxide trading system is its low transactions cost. However, not included in the estimates are the monitoring and enforcement costs for each emission source. This has yet to be quantified but is expected to be substantial. Moreover, the trading system does not replace the commandand-control system. Remaining in effect are regulations like the best available control technology for new emission sources. This may be another reason why the prices for the allowances are so low. There may not

be very much of a difference in compliance costs across emission sources.

Free market environmentalists ought to take a lesson from this experience. Well-defined and enforced property rights are key in coping with environmental problems. Systems that are designed without this feature should not be accepted on blind faith.

Jim Johnston Amoco Senior Economist (retired) Wilmette, IL

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Joskow, Paul L., Richard Schmalensee, and Elizabeth Bailey. 1999. The Market for Sulfur Dioxide Emissions. *American Economic Review* (September): 669–85.

Editor's Note: The original "Tangents" article is available from PERC and can be found on our Web site at http://www.perc.org/tangfeb99.htm.

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#### **EXCERPT**

## DEATH TAX, DEATH KNELL

By Clay J. Landry and J. Bishop Grewell

The final audit from the Internal Revenue Service known as the inheritance or "death tax" can be the death knell for countless farms, ranches, small businesses, and—perhaps surprisingly—for free-roaming wildlife.

Farmers and ranchers not only provide the food on our tables, but they also offer up the open spaces and forage areas that wild animals need. Nearly 75 percent of all wildlife and half of all endangered species in the United States live on private lands, more often than not agricultural lands. The federal estate tax threatens to close down these landowners and the habitat they provide.

The tax is levied when property worth more than \$650,000 is passed from one generation to the next after the owner's death. Frequently, the inheritance is in the form of a small business or small farm. Farms especially are often in an awkward position common in agriculture—"dirt rich" but "dollar poor."

Often the heirs are forced to sell land in small parcels to cover the tax, while keeping some of the farm. The property becomes increasingly fragmented. Fences are erected and roads are built. Wildlife find migration corridors cut off and their foraging grounds destroyed by new development. According to Michael Bean of Environmental Defense, "Federal estate tax requirements are destroying some of the largest and most important endangered species habitats in private ownership." Yet the estate tax raised just 1.3 percent of total federal revenues for fiscal year 1998, reports Bruce Bartlett of the National Center for Policy Analysis.

If the United States maintains its estate tax (the second highest rate in the world), more people and more wildlife will feel the sting.

This excerpt comes from "Death Tax Can Be Death Knell," published in the Salt Lake Tribune and other newspapers.