

MINUTES OF THE COMMITTEE ON HIGHER EDUCATION.

The meeting was called to order by Chairperson Tom Sloan at 3:30 p.m. on March 12, 2003 in Room 231-N of the Capitol.

All members were present except: Representative Krehbiel, Excused
Representative Kuether, Excused
Representative Neighbor, Excused
Representative Winn, Excused

Committee staff present: Mona Gambone, Committee Secretary

Conferees appearing before the committee: Dr. Ed Hammond, President, Fort Hays State University
Dr. Phil Halstead, Executive Director, Business &
Technology Institute, Pittsburg State University

Others attending: See attached list

Chairman Sloan called the members' attention to the minutes of the March 10 meeting and asked them to call the Committee Secretary with any changes by 5:00 the next day or they will be considered approved as printed.

Chairman Sloan told the Committee that the Senate had debated SB 7 today, it will go on Final Action tomorrow where it will likely pass and our Committee will hold the hearing on SB 7 next Wednesday (March 19).

Chairman Sloan introduced Dr. Ed Hammond (Attachment 1). After his presentation, he responded to questions from the Committee.

Chairman Sloan introduced Dr. Phil Halstead (Attachment 2). After his presentation, he responded to questions from the Committee.

Chairman Sloan thanked both conferees for appearing before the Committee.

There being no further business, the meeting was adjourned at 4:30 p.m..

The next meeting is scheduled for March 17, a Joint Committee meeting with the House Committee on Agriculture, in Room 519-S.

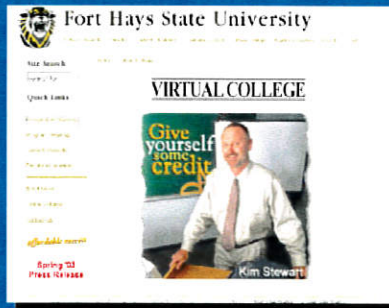
Fort Hays State University Virtual College

Dr. Edward Hammond
President of FHSU

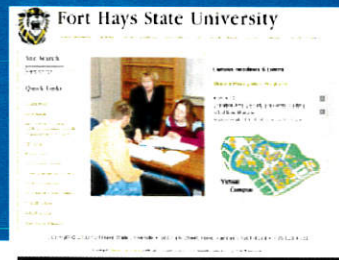
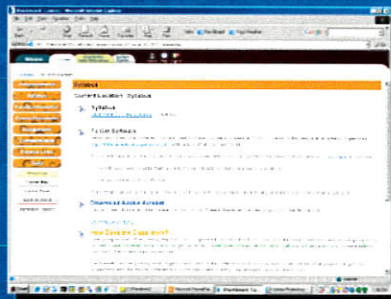
Mission of FHSU

“Fort Hays State University, a regional university principally serving western Kansas, is dedicated to providing instruction within a computerized environment in the arts and sciences, business, education, the health and life sciences, and agriculture
. . . A statewide strategic focus of the university is the integration of computer and telecommunications technology with the educational environment and the work place.”

What is the Virtual College?

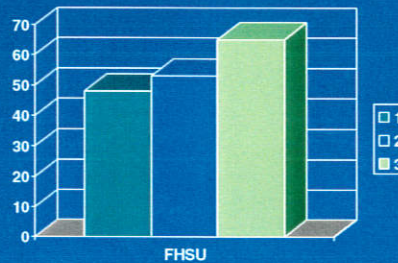


???

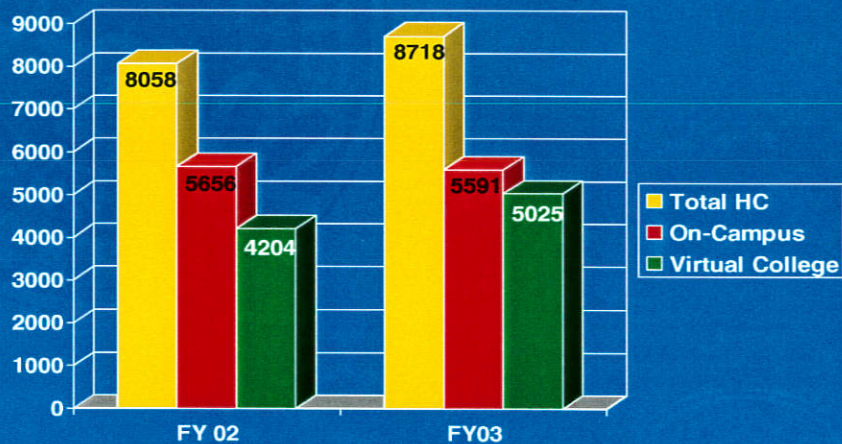


Vision for the Virtual College

- Goal of 6,000 students.
- 6,000 on Campus
- 6,000 Virtual College
- Institution that serves 10,000 individuals.

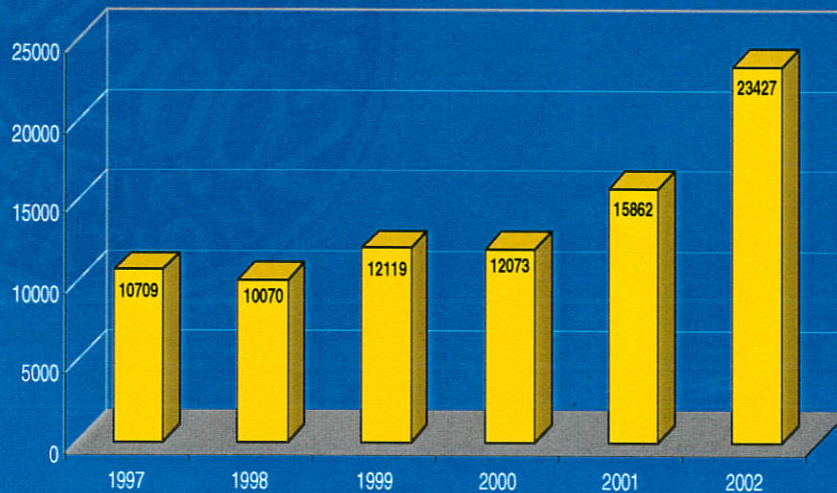


How Close to the Goal?



Unduplicated Headcount

Unduplicated Virtual College Student Credit Hours



Distance Learning is More than Technology

- Distance Learning is a System
- Course Design and Delivery
- FHSU's CTELT
- Creation of Quality Interaction, Motivation and Learning



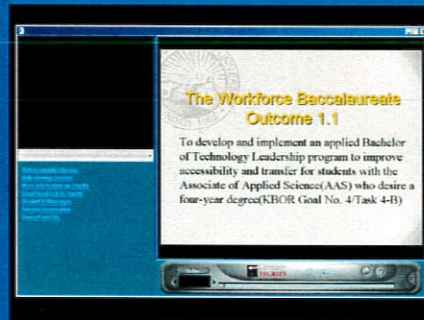
Distance Learning is More than Technology

- Management and Organization Issues
- Marketing to New Audiences
- Alternative Ways to Respond to Student's Needs



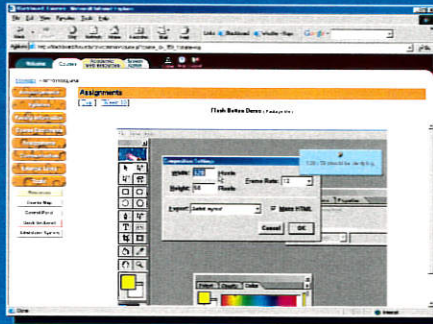
Trends in Distance Learning

- Trends towards a broad mix of techniques, methodologies and media
- Mix of blended technologies
- No one technology dominates



Trends in Distance Learning

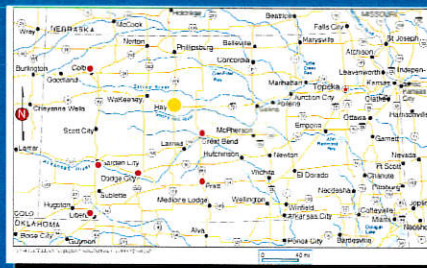
- Blend of audio, video and computers
- Networking computers enables email, video, CD-Roms, audio, printing, etc.
- Integration of systems for better learning



Virtual College Delivers All Forms of Distance Learning

Synchronous

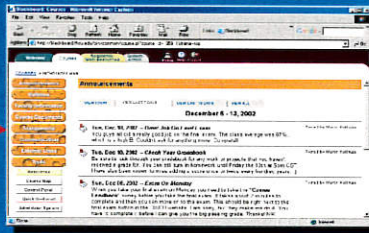
- Interactive Television: We utilize the art of Internet Protocol Interactive Television.
- Connect to six sites in Western Kansas.



Virtual College Delivers All Forms of Distance Learning

Asynchronous

- Video, Audio, CD-Rom, Internet/Online Courses



www.



Virtual College is More than Delivery Methods

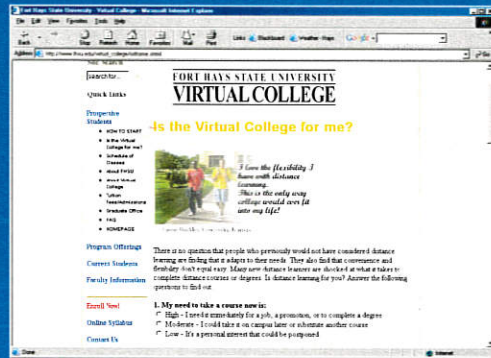
Focus on Quality Customer Service

- Online Textbooks and Study Manuals – MBS
- 24 X 7 Information and Technical Hotline – Tiger Info
- Online Library Resources – 12,500 journals
- Individual Advising Online and Over Phone
- Online Tutoring – Smarthinking.com
- Online Posting of Resumes and Other Career Planning

Virtual College is More than Delivery Methods

Focus on Quality Customer Service

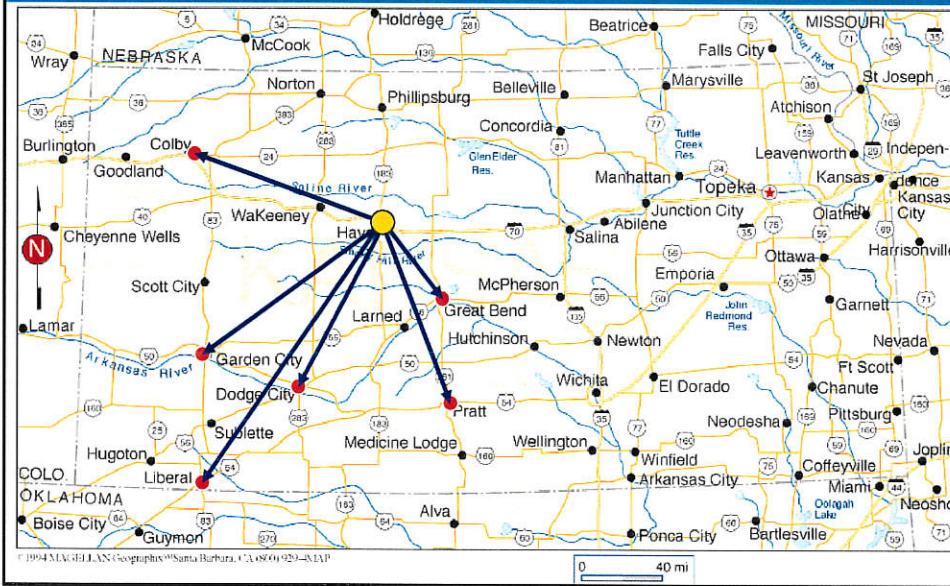
- Online assessment for students to determine if they are likely to succeed in Distance Learning.



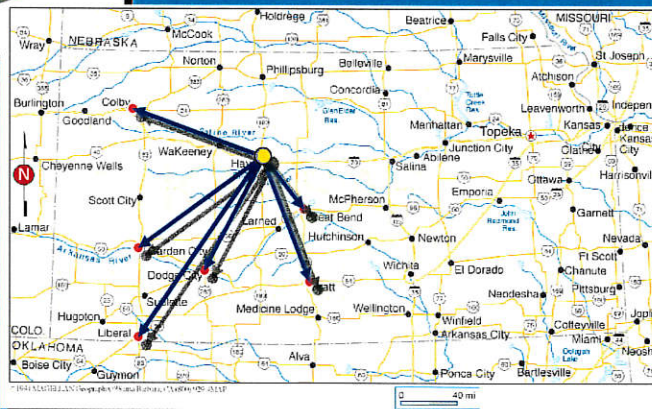
Virtual College Student Services

- Online registration and enrollment
- Online or telephonic academic advising
- Online grades
- Online class schedule
- Online transcript request
- Lifetime email account
- Online or telephonic bookstore
- Online syllabi
- Online financial aid applications
- Discount laptop computers
- Telephonic Information Hotline - *Tiger Info*

Kansas Impact

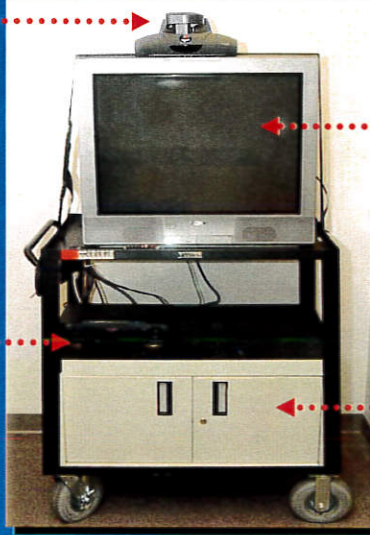


IPTV Network



Remote Location ITV Cart

Polycom



32" Sony Wega
Television

VCR

Overhead
Camera



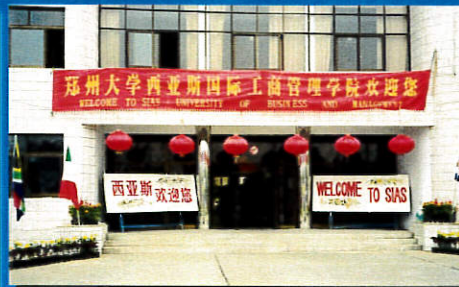
Virtual College has Reached Beyond Western Kansas

- Eastern Kansas Regionally
 - Partnerships with Community Colleges and Corporations
- Nationally
 - Navy College Partnership and NCPACE
 - Coast Guard



Virtual College has Reached Beyond Western Kansas

- Sias University
- UIBE



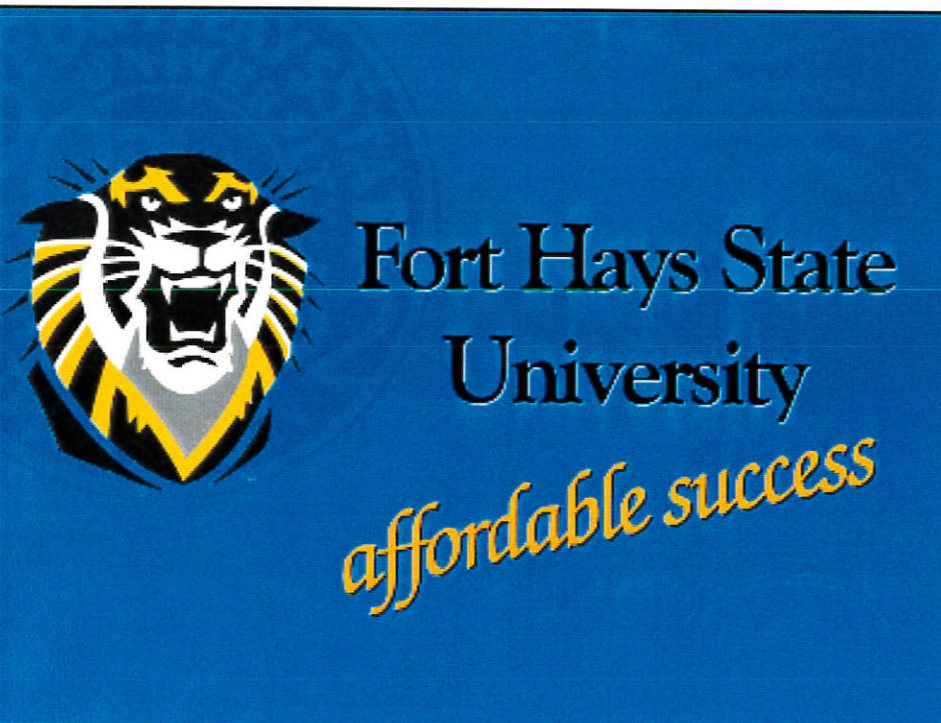
FHSU Doesn't Just Offer Courses, But Offers Degrees

➤ Bachelors

- Bachelors of General Studies
- B.S. in Technology Leadership
- B.S. in Nursing
- B.S. in Justice Studies
- B.A. in Sociology

➤ Masters

- Master of Liberal Studies
 - Criminal Justice
 - English
 - Gerontology
 - Human Resource Management
 - Information Networking
 - Instructional Technology
 - Mathematics
 - Public Administration



PITTSBURG STATE UNIVERSITY

**For Kansas House of Representatives
Committee On Higher Education**

March 12, 2003

**PSU Economic Outreach
To Southeast Kansas & Beyond**

Need – Most distressed region is Southeast Kansas

Solution – Integrated economic outreach plan by regional state university, PSU

Business & Technology Institute (BTI)

- Vision, Mission, How We Do It
- Results / Accomplishments Summary
- Funding Sources
- County Distribution of Services
- Leadership & Outreach
- Link To Kansas Strategic Plan

- Small Business Development Center
- Grants & Special Projects
- Kansas Polymer Research Center
- Mid America Manufacturing Technology Center
- Alliance For Technology Commercialization
- Certified Development Company
- Kansas Department of Commerce & Housing

Kansas Technology Center / College of Technology

- Automotive, Graphics & Imaging, Engineering Tech, Technical Education

Southeast Kansas, Inc.

- Councils, Funding, Governance

PSU Economic Impact Assessment

- Direct Impact: \$157 million
- Value of Degrees: \$609 million
- Faculty and Staff Contributions

PSU – SEK Integration / Mobilization of Resources As New State Model

Presented By: Dr. Phil Halstead, Executive Director, Business & Technology Institute (BTI)
620.235.4925, jhalstea@pittstate.edu

Attachment No.: _____

House Higher Education Committee

Meeting Date: 3/12/03

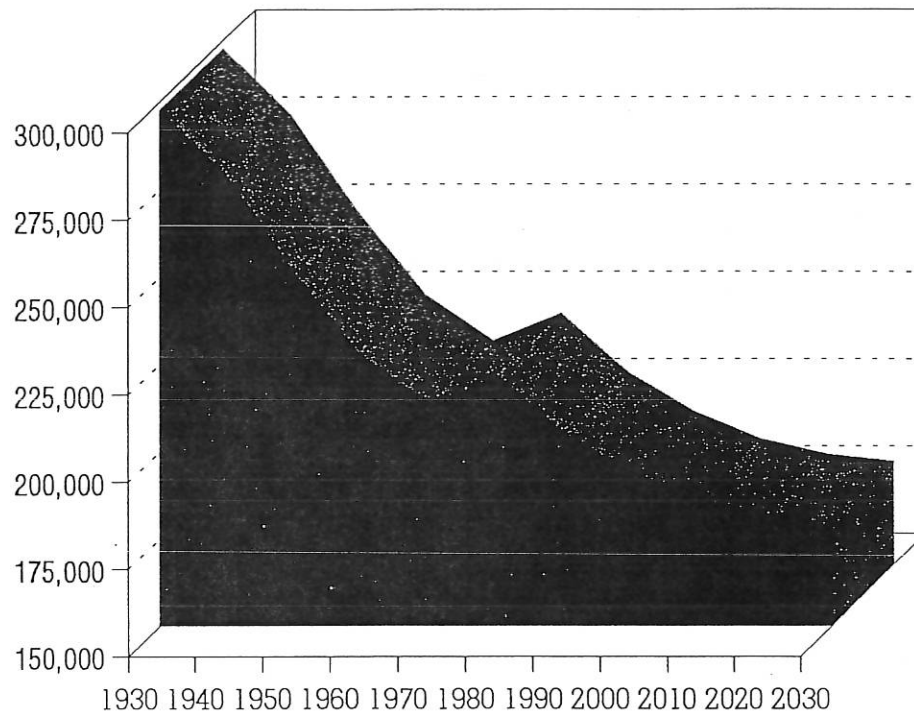
Attachment No. _____

2

I. Economic Development Review

THE PROBLEM

100 Year Population Profile



County Economic Vitality & Distress

Kansas Regional Data

The Southwest region continued as the least distressed region of the state, although the average ranking of this region has risen slightly since the Vitality and Distress Report was first published in 1989. This region is typified by high per capita incomes, high per capita property valuation, and low welfare populations.

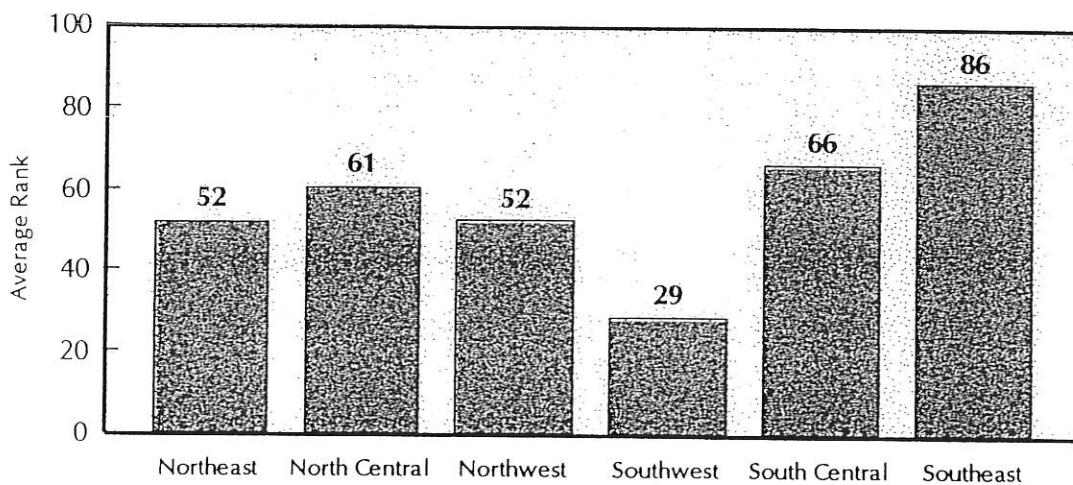
The Southeast has continued as the state's most distressed region, characterized by high levels of population loss, an increasingly aging and dependent population, a declining workforce, and significant employment loss. This region has deteriorated relative to other regions in the state, rising a total of four ranks since 1989.

The Northeast and Northwest regions tied in average regional rankings as the second least distressed regions in Kansas. The Northeast region has also achieved the greatest relative improvement in the average rankings since 1989, improving by a total of seven ranks. The Northwest region has improved by five ranks. Although the Northwest has witnessed more population loss than any other region, this region has increased its employment levels over the past half decade, has relatively high per capita income, and has the lowest welfare population in the state.

The South Central region has suffered the greatest declines in the average rankings since 1989, falling by ten ranks. Although this region has experienced considerable population and employment gains, it suffers from low per capita income and property valuation, and a relatively high percentage of population receiving Aid to Families with Dependent Children and General Assistance.

Data for each of the eight indicators are provided in Table 1 for both regional and county levels, while average regional rankings are displayed for 1995 in Figure 9.

Figure 9
Average Rank by Region, 1995
County Economic Vitality and Distress



Vitality & Distress Formula

This analysis combines eight indicators into an overall assessment of economic vitality and distress. These indicators are:

- 1) net population change,
- 2) elderly population,
- 3) labor force,
- 4) long-term employment growth,
- 5) short-term employment growth,
- 6) per capita property valuation,
- 7) per capita income, and
- 8) AFDC/General Assistance participants.

To understand a county's economic strength, one must concentrate on the combined effect of these factors. This is because the economic status and wealth of a county cannot be obtained through a simple linear relationship of one or two economic indicators. Claims of an area's economic status based on unemployment rates or business formations, though undoubtedly providing useful information, cannot reasonably stand apart from other indicators. Economies are multi-dimensional and understanding them depends not only on employment and income, but also on factors such as changes in population and dependency of the area's families on governmental support.

These eight indicators were grouped, for this analysis, into three categories: wealth, growth, and dependent population. The **wealth** category includes per capita income, per capita property valuation, and AFDC/GA indicators. The **growth** category includes long and short-term employment change, and population change indicators. Finally, the **dependent population** category includes both the elderly and labor force indicators. Counties were ranked for each category and assigned a quintile rating with the highest 20 percent receiving a "1" and the lowest 20 percent receiving a "5". Within each of the three categories, individual indicators carried the same weight in producing an average category score. These three scores were then weighted to produce the final score. The corresponding weights for each group were: wealth - 45 percent, growth - 35 percent, and dependent population - 20 percent. The weights assigned are arbitrary, but are intended to indicate their relative importance. The combined score had a minimum of 10 and a maximum of 50. A higher score indicates greater distress.

It is important to note that the total score is relative to the vitality and distress of other counties. As a result, small changes in a particular county's ranking from year to year will likely be as much a result of economic changes in other counties as to conditions in that particular county. Dramatic changes will more likely be the result of real changes in a county's economic condition.

The dwindling heartland. America's new frontier

By Laurent Belsie
Staff writer of The Christian Science Monitor

FEB 11, 2003
Christian Science Monitor

LEBANON, KAN.



ROBERT HARBISON - STAFF

AMERICAN GOTHIC: In Lebanon, Kan., Susan and Paul Coleman (above) dwell in America's depopulated center.

FROM the front window of the American Legion hall in Lebanon, Kan., Phyllis Bell can still look across Main Street and pick out where Adams Clothing, Hobbs Variety, and Chadbourne's Shoe Shop used to stand. Right after World War II, farmers could come into town, get a haircut, buy a car, take in a movie, or shop at one of Lebanon's seven grocery stores.

Now, the commercial district has dwindled to a branch bank, LaDow Market, and a beauty shop, where the hairstyles have evolved from the beehive 1950s — and cost more. With fewer than 300 residents, the town can no longer support a high school (closed in 1984) or a grade school (shuttered in 1991). Even many of the homes sit vacant.

"When we tear down those houses, they still find dust from the Dust Bowl" — usually in the

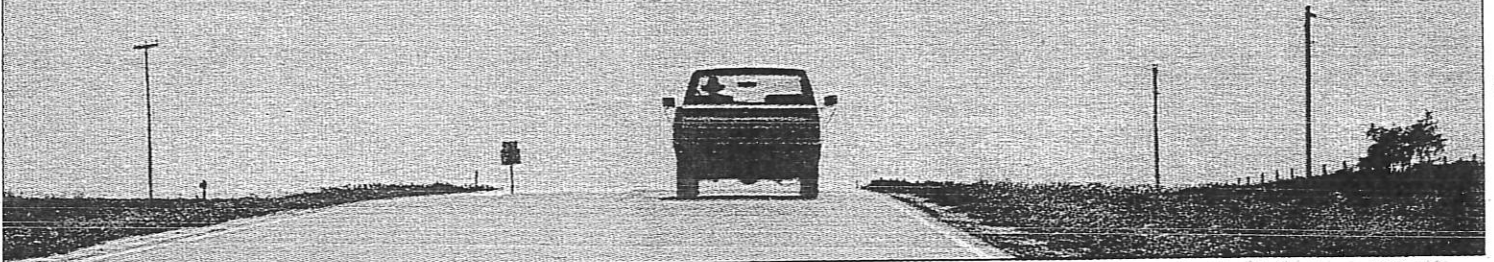
ALONE ★ ON THE ★ RANGE

Part 1 of a four-part series on the frontier's return.

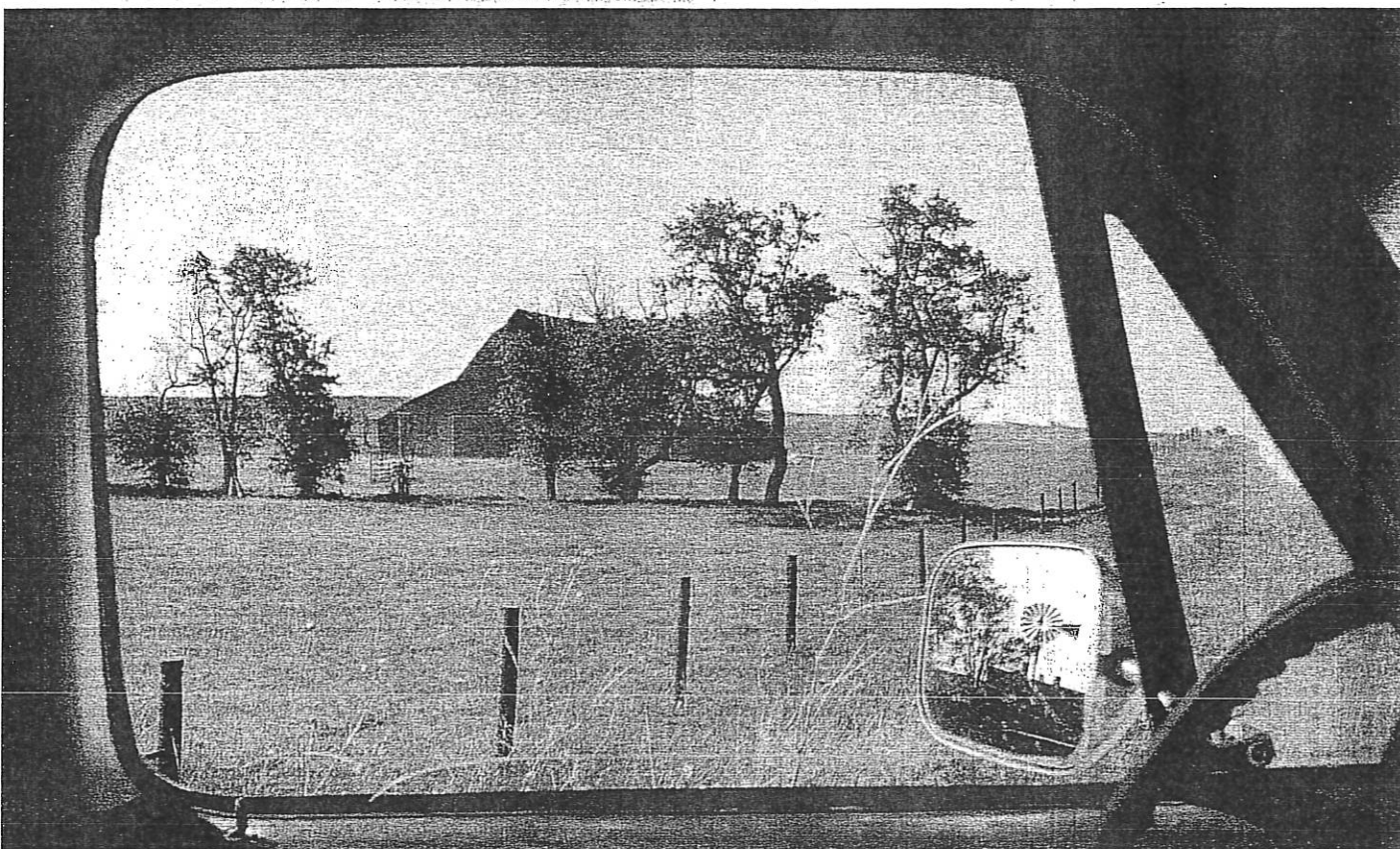
rafters, says Ms. Bell, managing editor for the Lebanon Times, a weekly newspaper.

Welcome to Smith County, home of the geographic center of the contiguous United States, the Kansas state song "Home on the Range" — and the reemergence of America's frontier. As strange as it may sound, more than a century after Americans laid to rest the notion of a frontier, it's reappearing here on the Great Plains.

See **ALONE** page 10



ANDY NELSON - STAFF



PHOTOS BY ANDY NELSON - STAFF



ON THE FRONTIER: An abandoned farmstead (above) near Lebanon, Kan., is reflected in the mirror of a truck. Although many businesses in the town and its surrounding area have shut down, LaDow Market still draws a lunch crowd. At left, Kenneth Ingram (l.) and Theron Haresnape discuss the farm economy.

	Smith County	US overall
Population	4,536	281 million
Median age	46	35.3
Median household income	\$28,694	\$41,994
Median value single family home	\$37,400	\$119,600
Households below poverty line	12.1%	11.8%

Source: Census 2000; income and poverty data from 1999

TOM BROWN - STAFF

"We're trying to get some federal money," Mrs. Snow says. "But it's pretty tough when you are a handful of people and [the volunteers are] all busy." Indeed, no self-respecting suburban would call the pace of life here slow. Ingram, who lays out the paper and writes the stories, leaves soon after lunch for an appointment. Her husband, Joe Cheesman, trundles off to the post office to play Santa to more than 20 children. Gladys Kennedy, one of Lebanon's oldest residents, has made a quilt for the fundraiser. She uses the cash box and tomorrow night, despite her long affiliation with the Lebanon Christian Church, she's joining

the local Methodists for caroling around town in a hay wagon. She's also led a Girl Scout troop for six decades.

In all that period, when was Lebanon's best time? "Right now," Mrs. Kennedy says, emphatically. "People think they need to be in a bigger place. [But] how long does it take to get to the steakhouse? Or the doctor's?... I think we've got everything we need."

* * *

Next door, a crowd is gathering at LaDow's, purveyors of everything from deli ham to Christmas cards, for the \$4 lunch special. There, Paul and Susan Coleman - Lebanon's newest residents - get to know their neighbors. (Actually,

it's hard not to get to know them because LaDow's can only fit three tables. So diners slip into any available chair, no matter who's sitting next to them.) The couple, married this summer, retired early and moved from suburban Denver this fall to soak up the quiet and fresh air of the Kansas prairie.

"It's a beautiful small town," says Mrs. Coleman. "Everybody knows each other. Everybody cares."

Mr. Coleman patters around in his giant workshop behind his house and goes hunting at sunset almost every day in season. His only regret: The nearest McDonald's is 60 miles away.

"People are getting fed up with cities," he says. Right before he moved here,

"people came up to me at work and would say: 'What's it like?' I would say: 'It's quiet. There's no traffic. You don't hear rock music.' They would say: 'I would really like something like that.' I would say: 'It's there for the taking. You don't have to prequalify.'"

Yet so far, no one has taken him up on the offer. "I don't want to romanticize it," says Calvin Beale, a US government demographer who has visited two-thirds of the nation's 3,100 counties. "No country can afford to let an area become semi-depopulated because of economic problems without understanding why it's happening and what may be some of the alternatives that would address some of these problems."

The Plains frontier is with shrinking populations and mounting poverty, making government services difficult to deliver. To cope, it's trying everything from virtual schools to mobile hospitals.

ALONE ★ ON THE ★ RANGE

Part 3 of four

By Laurent Belsie
Staff writer of The Christian Science Monitor

HETTINGER, N.D.

THE county sheriff doubles as unofficial police chief for Hettinger and Reeder, N.D. The county recorder spends most of her time clerking for the district court. Then there's Betty Svihovec. She's city auditor, county auditor, city treasurer, superintendent of schools, and something called the county risk manager.

If all this sounds like rural cronyism, think again. This is Adams County's bid for survival.

With a dwindling population and tax base, this expanse of rolling farmland and brick storefronts is straining to maintain services for 2,600 residents spread over nearly 1,000 square miles. Never mind that median household income falls \$600 below that of the poorest state in the Union. Or that the typical resident here has edged a decade closer to retirement than the national norm.

Somehow, the innovators of Adams — and other Great Plains counties like it — are finding ways to keep things running. That's one of the ironies of the reemergence of America's frontier (counties with fewer than six people per square mile). The new pioneers aren't those who move; they're the ones who stay and try something different.

Unfortunately, even the innovators are caught in the region's vicious demographic cycle. Two-thirds of the Plains frontier is losing population.

As jobs dwindle, young people flee to the cities. Fewer young families means fewer children, which leads to a smaller pool of families in the next generation. As its tax base shrinks, the frontier's remaining residents are edging toward the stage in life where they're likely to demand more services. Already, a third of the region's households receive Social Security. At some point, economists and demographers say, the system simply breaks down.

"It's the phenomenon of a slowly sinking middle," says Lester Thurow, a native of Montana and now professor of economics and management at the Massachusetts Institute of Technology in Cambridge. By the time he retires, he predicts, "this will be the poorest part of America."

Can the region avoid that fate? Some frontier communities are experimenting vigorously — particularly in the public sector — to neutralize the effects of depopulation and wider open spaces. No one knows if they'll succeed in the long run.

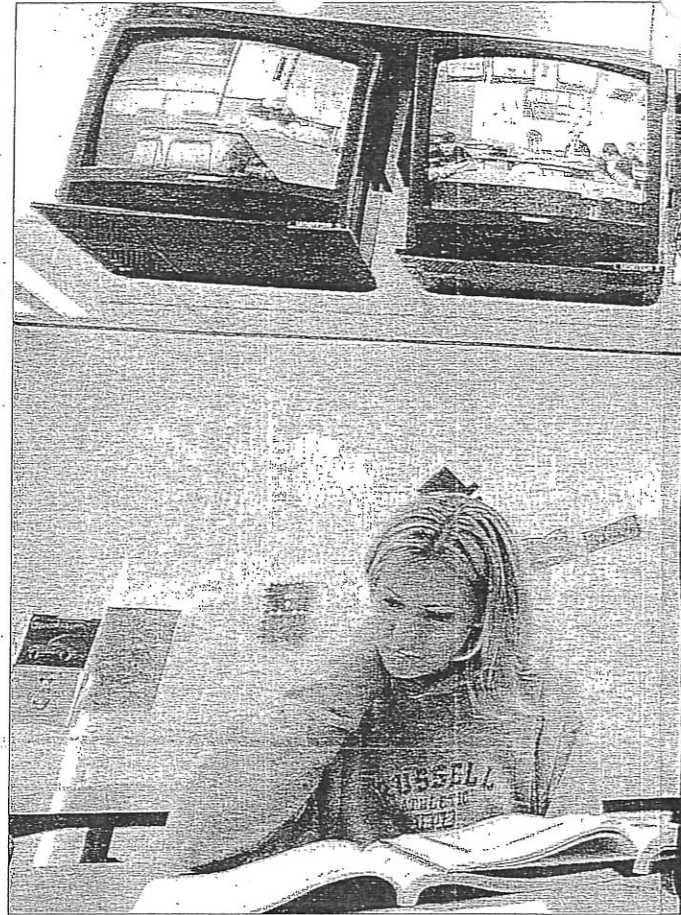


JUST OUTSIDE TOWN: Horses nose through grasses on snowy plains near Hettinger, N.D.

	Adams County	US overall
Population	2,593	281 million
Density	2.6 people per square mile	79.6
Median age	45.6	35.3
Median household income	\$29,079	\$41,994
Median value single-family home	\$37,500	\$119,600
Households below poverty line	12.1%	11.8%

Source: Census 2000; income and poverty data from 1999

TOM BROWN — STAFF



On a snowy morning at the high school here in Hettinger, Bonnie Smith greets her English composition class in 21st-century fashion: by interactive TV. Although three students are sitting in her classroom, another dozen follow the proceedings from Scranton, 30 miles away, or Bowman, 40 miles away. Fax machines, microphones, and banks of monitors and cameras keep all three classrooms connected.

Mrs. Smith and the students manipulate the technology with ease. "I love this camera," Smith says of an overhead lens that broadcasts to the students what she writes on a pad. With it, she goes over a student's paper with the entire class — something that would be much harder in a conventional classroom.

The two-year-old system represents the school's latest step in a decade of experimenting with long-distance learning. It has allowed the school to continue offering German, entrepreneurship, even art — often crossing county lines and jurisdictions to do so.

"It's more fun" than a conventional class, says senior Leigh Johnson. "You see [these same] people sitting at basketball games" in the away bleachers.

But students and teachers agree the system doesn't quite live up to the live interaction of a traditional classroom. And,

so far, the technology works best for highly motivated students, Smith adds.

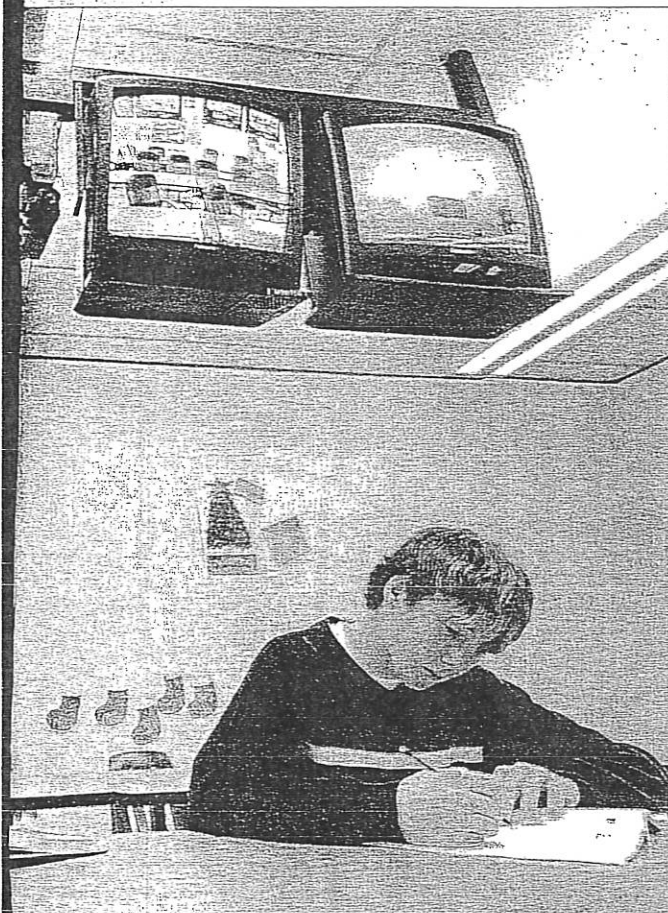
Jim Long, chief executive of West River Health Services, knows all about crossing county and even state lines. He pulls out a map of his service area, which he calls his "huge potato" — a sprawling oval the size of West Virginia that spills over into South Dakota and Montana.

To reduce travel times for patients, the nonprofit center's 15 physicians and 10 nurse practitioners and physicians' assistants staff 11 part-time satellite locations outside Hettinger. And when critically ill patients face a two-hour ride to Hettinger in, say, a South Dakota ambulance service, the hospital on occasion sends its own ambulance to meet them halfway. Then, patients can get attention from a more highly trained paramedic before they reach the emergency room.

"We have always prided ourselves on being innovative and aggressive," Long says. But he is butting up against the same economic and demographic forces the rest of the Plains frontier faces. To keep a certain volume of business, he has to continue expanding his service area. Even then, its population is still declining. At its peak, West River delivered 300 babies a year. The current total slipped to less than a third of that.

Besides economic and demographic

not much town to govern



FAR-FLUNG LEARNING: At left, Leigh Johnson and Micah Wilson use closed-circuit television to take an entrepreneurship class from a teacher at another high school in western North Dakota. Above, Main Street in Hettinger, N.D., is seen through the window of a local gift shop and coffee shop. The town has consolidated some services with the county — an arrangement that saves it an estimated \$100,000 a year.

less a year than the comparable West Virginia household in 1999, yet its poverty rate remained a dramatic 5.7 percentage points below West Virginia's.

To cope with its stagnant tax base, the county has consolidated services. Hettinger, the county seat, folded its police force into the county sheriff's office in 1984, merged its street and public-works departments with the county's a year later, and now works closely with the county on various projects.

The arrangement means Hettinger devotes two-thirds of its \$260,000 budget to pay for county services. In return, it saves easily \$100,000 a year, estimates Mrs. Svihovec, who's credited with pushing the consolidation plan.

Police protection, for example, costs almost the same today as it did when Hettinger ran its own police force — despite 20 years of inflation. And county help has allowed the city to get federal money to repave the highway down the center of the well-kept and still-vibrant town.

Not everyone's happy. "I'm getting tired of working 250 hours a month," says County Sheriff Gene Molbert. "It has not gotten people coming back."

* * *

Some observers argue that the whole county structure — a British import from colonial days — doesn't make sense for the frontier, anyway. James Satterlee, a retired sociologist from South Dakota State University, has suggested counties join forces to create what he calls a "New Community." One government center and a handful of well-located schools could serve a half-dozen counties or "neighborhoods," as they would be called.

For now, what's the key to begin reversing the decline?

"Cooperation," says Svihovec. Although people don't want to hear the problems associated with depopulation, "you have got to get beyond that. You have got to break down those walls and start communicating."

This would be a good time for Adams County to ratchet up that cooperation: Svihovec plans to retire next month.

forces, there's another problem. The federal government reimburses rural hospitals less generously for Medicare patients than it does urban hospitals. Two federal initiatives should reduce the difference. Still, the disparity crystallizes a widespread feeling among frontier communities that state and federal government haven't been of much help.

"Why make it more difficult to maintain the services in the rural areas, which only serves to depopulate them?" Long asks. "Rural America should not be forgotten and disposed of because it doesn't fit into the New York way of things."

* * *

Consider the plight of Bridgeport, Neb. At middecade, federal clean-water standards will force its 1,600 residents to clean up the naturally occurring uranium in its municipal water. Their choices: build a treatment plant or hope to find cleaner water by digging new wells. Even with state or federal help to build a plant, residents would have to pay roughly six times their current monthly water bill simply to run it, estimates city administrator Finley deGraffenried.

In more densely populated areas, neighboring towns might share the cost. Out here, the nearest city is 15 miles away, and the pipeline needed to connect

it would cost at least \$1.5 million.

"I don't want to boo-hoo this deal. Some of these communities are dying and, frankly, maybe we ought to put a fork in them," Mr. deGraffenried says. But "let me tell you, there's a hole in the Midwest. (And) who gets the time; the money, the political pull?"

Indeed, the political clout of frontier counties was long ago eroded by depopulation. Of Nebraska's 49 state senators, for instance, only 10 represent the nearly two-thirds of the state west of Grand Island. In the US Congress, Rep. Tom Osborne alone represents the same territory — and then some.

Instead, frontier counties innovate locally. When the local cafe closed down in Gove, Kan., in the early 1990s, the county court had to cater meals from out of town for juries, and some officials threatened to leave. So the local community improvement group (which had already reopened the grocery in town) raised funds, as well as a new building, for the County Seat Cafe.

Or consider Loving County in the Texas oil patch, which has fewer people per square mile than any county in the contiguous US (or any part of Greenland, for that matter). Yet its 67 people still find ways to maintain all the traditional functions: a local court, a sheriff and deputy,

an auditor, a treasurer, and so on.

"You — just think smaller," explains County Judge Donald Creager, who can't remember the last time a felony was committed in Loving. The biggest challenge is getting reelected, he adds. "It doesn't take too many people upset at you to lose a majority."

One of the enduring mysteries of the Plains frontier is that it has so far avoided widespread poverty. Although its median household income — \$30,079 — rank nearly as low as West Virginia, the poorest state in 1999, its share of poor households looked significantly smaller (15.8 percent versus West Virginia's 17.9 percent). One explanation: The frontier may spread incomes more evenly than Appalachia does, and its household income actually grew faster than the national average during the 1990s.

But demographers warn that many frontier households remain uncomfortably close to poverty. "It's one of those untold stories," says Richard Rathge, director of the North Dakota State Data Center on the campus of North Dakota State University in Fargo. "If you drop below the poverty line, you're on the radar screen. But if you're marginally above the poverty line, you're not."

That describes Adams County, N.D., to a T. Its median household earned \$650

In the search for a new vision for vanishing heartland, rural towns consider digital hubs, wind farms, and a 'buffalo commons.'

Un-plain ways to reinvent the Plains

By Laurent Belsie
Staff writer of The Christian Science Monitor

S EVEN years ago, this isolated oil and ranching community staked a claim to the digital frontier. It wired itself with advanced telecommunications, advertised on the Internet, and waited for droves of info-entrepreneurs to come and set up shop.

But a funny thing happened on the way to the future. The droves never came. And this hard-working community on the edge of the Badlands in Theodore Roosevelt National Park learned an important lesson.

Technology alone can't save the heartland. What it needs is a new vision, a new way of defining itself that can rally its residents, corral their energies, and appeal to the rest of America.

While even Watford City's most ardent promoters don't claim victory yet, the city is well on its way to diversifying

into 21st-century industries: Its entrepreneurial residents can already boast of two high-speed Internet providers, four video-conference facilities, a cutting-edge Internet-savvy bank, several information-dependent service companies, and an e-pharmacist.

LONE ON THE ANGE

Part 4 of four

An e-pharmacist? More about him in a moment.

That's impressive for any town of 1,400 people, doubly so for an outpost three hours from the nearest city of 50,000 or more. And if Watford City can reinvent itself, then perhaps other towns in the reemerging frontier from North Dakota to Texas can find ways to transform themselves. Sparsely populated (fewer than six residents per square mile) and losing more people every year, this frontier is struggling to hold together its economy, its government services, and its social cohesiveness.

Admittedly, the few visionary ideas for its future sound a little grandiose:

- Incubator for advanced cyber-society.

- The Saudi Arabia of wind power.
- Safari capital of North America.

Many of these moves would require a cultural shift: away from bootstrap individualism and more toward regional cooperation. "The whole philosophy [is]: 'You've got to do it yourself,'" says Richard Rathge of the North Dakota State Data Center at North Dakota State University in Fargo. But "if we could develop a national or state policy that would facilitate interdependence, I think we'd see a great change."

Sometimes big change starts with the smallest push, as Watford City has discovered. When Gene Veeder returned here in the mid-1990s, he didn't know a T1 line from a T-bone steak. He'd only heard the term from a telemarketing firm that was considering relocating to



PHOTOS BY ROBERT HARRISON - STAFF

'There isn't any single thing that can save the heartland, but the Internet can sure make [life] easier.'

- Gene Veeder, McKenzie County employee

	McKenzie County	US overall
Population	5,737	281 million
Density	2.1 people per square mile	79.6
Median age	39.5	35.3
Median household income	\$29,342	\$41,994
Median value single-family home	\$51,100	\$119,600
Households below poverty line	15.7%	11.8%

Source: Census 2000; income and poverty data from 1999

TOM BROWN - STAFF

the area. But since Mr. Veeder was the job-development guru for McKenzie County, whose mainstay oil and ranching industries had fallen on hard times, he decided to get informed.

The search led him to Ray Hintz, a local high school math teacher with a crazy idea. If he pirated some bandwidth from the school's T1 (a high-speed phone line), he could rig rooftop antennas to bring high-speed Internet service to local government offices at a fraction of the usual cost.

The school agreed to share its T1 line, hired Mr. Hintz to coordinate the project, and eventually hosted computer and Internet training courses for the community. The county commissioners came up with \$20,000 for computer servers.

For a few years, the city ran its own Internet service for residents until private companies moved in to take over the job. By the time state economic-development officials came to town to push their own rural Internet strategy,

they found Watford City was already gigabits ahead.

But the community quickly learned that most telecommuting professionals, who can live and work anywhere, preferred mountains or an ocean in their backyards. Fortunately, Watford City has charms of its own that keep current residents here - easy access to Roosevelt National Park and fine fishing and boating at Lake Sakakawea. And local entrepreneurs were eager to experiment with the new technology. The result is a town that has defied the rural stereotypes and become one of the most wired small towns in rural America.

* * *

Even before the city embarked on its digital adventure, First International Bank and Trust was pushing the envelope: it moved to in-house check processing, took over six offices of a failed savings-and-loan, and bought two Arizona banks. To manage its far-flung empire, the bank invested heavily in infor-

mation technology, including video-conferencing to conduct all-employee meetings and remote job interviews.

"It has allowed our business to grow despite the distances," says Stephen Stenehjem, president of the bank and grandson of the founder. Now, the company is upgrading its Web banking service to allow customers to view their checks online, front and back - a cutting-edge technology that few banks offer anywhere in the country.

Or consider Larry Larsen, local drugstore owner and soon to be the state's fifth e-pharmacist. Sure, he sells prescriptions over the Internet. But what really sets him apart is his use of Internet video. By placing a special camera in his second pharmacy, 50 miles away, he'll be able to monitor each step remotely, as his employees fill out prescriptions. Then he and the customer can step into private rooms where they converse e-face to e-face, so to speak.

The system not only saves him from

Continued on next page

USA

Continued from previous page

traveling back and forth, but it also means he can hire a less expensive pharmacy technician rather than having to recruit a full-time pharmacist, which is in short supply these days.

"The one thing that saved Watford City is that the people who came back here forward-thinking," he says. "It's that kind of 'we-can-do-it-ourselves' attitude."

Even outsiders have picked up on the mood. "What's going to save the heartland is the attitude of the people," says Marc Dansereau, project manager of CrossUSA, a software developer and one of the handful of outside concerns that have moved into the area.

The hardships of the heartland frontier breed entrepreneurs. In fact, a quarter of the region's households include someone who's self-employed. That's double the national average, and a substantial part of that entrepreneurship flows from nonfarm activities.

* * *

Take Janet Sanford. As business manager of the local school in Watford City, she learned how to run the lunch accounting program and struck up a relationship with the Minnesota-based developer of the software. The company offered her contract work, which she accepted. "I finally decided to go out of my comfort zone a little bit," she says.

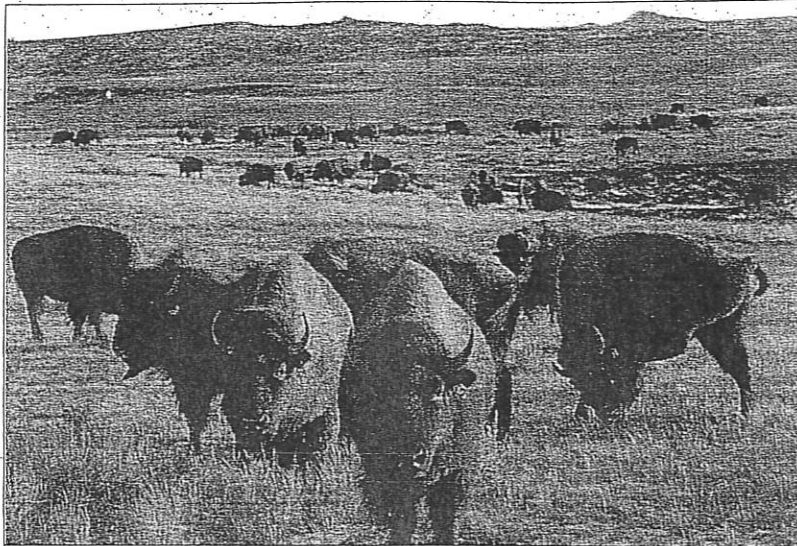
Now, she works from home as a full-time employee, helping schools downstate the program via telephone and providing technical support. "I have a dream job," she says.

Still, initial hopes that information technology could reverse the frontier's decline have faded. For all of Watford City's forward momentum, the county still lost 10 percent of its population in the 1990s.

"There isn't any single thing that can save the heartland," sums up Veeder, the county job-development expert. But the Internet can sure make it easier to live and work here and tear down some of the barriers."

Instead of importing technology, other grand ideas for the region's future involve resources it already has. Green energy, for example. The Plains boast some of the best-quality wind in the world to generate electricity. In theory, North Dakota alone could provide a third of the nation's electric power less, in practice, because wind offers only intermittent power unlike, say, a coal- or gas-fired plant).

Yet the state has



ECHO OF EARLIER TIMES: On Wayne Buchholz's ranch in Bowman, N.D., buffalo now roam again instead of cattle. With an estimated 300,000 head, the US now holds more buffalo than at any time since the early 1880s. One controversial proposal for America's frontier is to create a 'buffalo commons' - a vast unfenced region.

barely tapped the resource, in part because it can't export the energy. The nation's current transmission lines are operating near capacity, and utilities are reluctant to build new ones.

"If we had transmission, that would solve a lot of it," says Brian Parsons, program manager for wind applications at the federal National Renewable Energy Laboratory in Golden, Colo.

Last month, the Federal Energy Regulatory Commission proposed new incentives for utilities to pool their regional transmission lines and build new ones. But even if the incentives work, building new lines will likely take six years or more, Mr. Parsons says.

Another frontier proposal is federal grassland reserves, which would restore the ecosystem while attracting tourists: Dan Licht, chief proponent of the plan and author of "Ecology and Economics of the Great Plains," estimates taxpayers would spend less money buying the land for the reserves than they currently do when the US Agriculture Department pays farmers to take their land out of production for 10 years. And the Plains, unlike almost anywhere else in the United States, retain enough wide open space to re-create complete ecosystems.

Here in western North Dakota, for

example, the federal government already owns more than enough land - but in piecemeal parcels - to create North America's Serengeti, where 25,000 buffalo could reestablish their old roaming patterns, Dr. Licht argues. It's "a site that would rival anything found in Africa." So far, however, the idea has few takers.

* * *

Ironically, the frontier vision that has garnered the most publicity - dubbed the "buffalo commons" - has also generated the most disgust among residents. Sixteen years ago, Frank and Deborah Popper proposed that since people were leaving the region anyway, the federal government should buy them out. With that land, the government could then create a vast unfenced region where buffalo would roam, prairie dogs and other wildlife would return, and the ecosystem would slowly revert to the condition that white settlers originally encountered.

But the Poppers' plan came under heavy fire from many frontier communities, which resented the idea that their homes should disappear to make way for buffalo. Since then, the couple has given up on the federal government as a prime mover. Instead, they argue, the commons is coming piecemeal as private ranchers, public parks, and Indian reservations boost the number of buffalo. With an estimated 300,000 head, the US now holds more buffalo than at any time since the early 1880s, says Andrew Isenberg, author of "The Destruction of the Bison."

And it's not just buffalo. Mountain lions are beginning to move back to the Plains from the Rocky Mountains after an 80-year absence: Elk are returning to places where they haven't been seen for 100 years.

If wildlife is making a comeback and humanity is leaving, then perhaps nature and economics are imposing their own eco-vision of the rural Plains, some environmentalists argue. Maybe the rural Plains can't support large-scale settlement, they add.

At least, white settlement. The decline of the frontier Plains; after all, really represents the retreat of the white man. American Indian populations, by contrast, are growing.

Perhaps, just as suburban sprawl is forcing many communities to consider "smart growth" initiatives, the frontier is a lesson about smart decline.

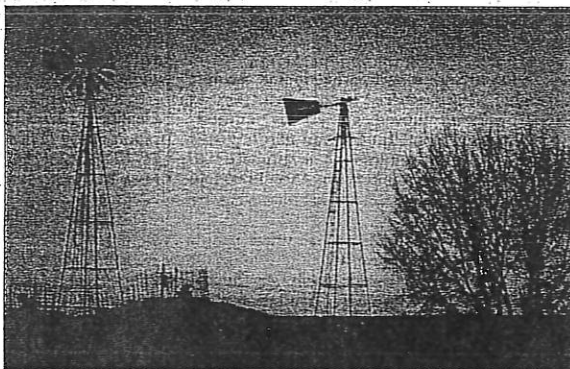
"It can be very difficult in many situations to come out for 'smart decline': it seems un-American," says Mr. Popper, a land-use planner at Rutgers University in New Jersey. "We like to think every place will keep growing. But all these places that have traditional agricultural economies have fallen farther and farther behind. And we've got to find something to do with these places."

Of course, the Plains remain unpredictable. They've repeatedly confounded the optimists: historian Frederick Jackson Turner, who thought settlement would conquer the frontier; Thomas Jefferson, who believed small farms were the bulwark and future of America; even the railroad barons, who believed - or pretended to believe - their new transportation technology would bring prosperity to all those new boomtowns springing up beside the track every 10 miles or so.

Maybe the frontier's resilient and innovative people will confound the pessimists, too.

Perhaps the last word belongs to Teddy Roosevelt, who experienced firsthand the joys and isolation and struggle that the Plains frontier has always doled out to its residents. At his Elkhorn Ranch, some 40 miles southwest of Watford City, Roosevelt learned to love the outdoor life, and then lost half his fortune after a blizzard decimated his cattle. He drew from those events, not defeat, but a challenge.

"I never would have been President," he later wrote, "if it had not been for my experiences in North Dakota."



BLOWING IN THE WIND: In Bowman, N.D., farm windmills offer one vision of the future. In theory, North Dakota has the potential to supply one-third of US electricity.

THE NEW CONTINENTAL DIVIDE

Overcrowded cities on the coasts. Dying rural communities in the interior. The way to save both may be to create a post-agrarian heartland

BY MICHAEL LIND

Two of our country's most cherished dreams are at risk. One is the American dream of upward mobility. The other is the romantic dream of settling the American heartland. These two dreams cannot be separated in the information age any more than they could be in the frontier past. Indeed, for many Americans in this century moving up may mean moving inland.

Today much of the Great Plains is undergoing a catastrophic demographic collapse. Stretching 1,600 miles from central Texas to the Canadian border and 750 miles across at its widest point, and containing all or most of ten states, this region accounts for a fifth of the land area of the United States, but only four percent of the population—about 12 million people. To put this in perspective, the population of the Los Angeles region is now greater than that of the Great Plains, an area five times the size of California.

Sixty percent of the counties in the Great Plains declined in population in the past decade. In 2001, ninety-nine U.S. counties had populations in which four percent or more of residents were eighty-five or older; most of these counties were in rural areas in the Great Plains. Many heartland communities face the prospect of becoming ghost towns, as older inhabitants die and younger residents move away. Already more and more of what early Americans called "the Great American Desert" fits the nineteenth-century definition of frontier territory: an area with no more than six inhabitants per square mile.

Meanwhile, the coasts are rapidly filling up. Although coastal counties occupy only about 17 percent of the territory of the contiguous United States, they contain about 53 percent of the nation's population. By 2015 the coastal population will have increased by the equivalent of two Californias—71 million newcomers—since 1960. In the same period the Pacific Coast alone, adding more than 28 million people, will have undergone a 158 percent increase in population.

The percentage of the U.S. population living in coastal counties has remained relatively constant since the 1960s. But the increase in absolute numbers means that the coasts are getting crowded. The official population density of the United States is only seventy-six people per square mile—compared with 134 in Europe and 203 in Asia. Density on the coasts, however, is much greater (and in the interior is much less) than the average suggests. By 2010, when Cali-

nia has 50 million people, it will have a coastal population density of 1,050 per square mile—considerably greater than the average in Europe or Asia. The Northeast currently has twice the population density of any other U.S. region; with 654 people per square mile, it is as crowded as Germany.

The crowding is intensified by immigrants, who are concentrated in a small number of “gateway” cities and states that are generally on the coasts. Owing to a high rate of immigration, which accounts for 70 percent of U.S. population growth today, the United States is experiencing a population increase just as other democratic nations are watching their populations decline.

The future demographic pattern of the United States may be a largely empty interior surrounded by a handful of densely populated metropolitan areas: “Bosnywash,” the Boston–New York–Washington corridor; “San-San” (San Diego to San Francisco); a “Texas Triangle” defined by Dallas, Houston, and Austin–San Antonio. The suburbs of expanding cities may fuse together, whereupon a process of inexorable “densification” may begin.

As a result of coastal growth and heartland decline, a new geographic divide is appearing in American society at the beginning of the twenty-first century: not the familiar rivalry between the rugged West and the effete East, or the Yankee North and the Confederate South, but a growing divergence between the coasts and the interior. Beyond the slow death of many of America’s small towns, this divide raises a number of serious issues.

The most obvious relates to national politics, as the stark contrast in the 2000 election between densely populated “Gore country” and thinly populated “Bush country” suggests. Al Gore could fly from California to Washington, D.C., without passing over a single state in between that gave him its electoral votes. That power in Washington is only partly related to population density does not clearly benefit any region, but it does undermine the very essence of the democratic process. On the one hand, the Electoral College and the U.S. Senate exaggerate the political power of the prairie, the Great Plains, and the Mountain States. Wyoming’s senators represent about half a million people; California’s represent 34 million. Yet every state has exactly the same number of Senate votes. On the other hand, many heartland politicians raise much of their money from the wealthy in coastal enclaves, prompting questions about whether they

represent their local constituents or their distant donors.

The geographic divide is also an economic divide. During the past decade seventeen of the twenty fastest-growing counties in the United States were on the coasts, as were eighteen of the twenty counties that lead the nation in per capita income. Many CEOs and Hollywood stars seek a change of scenery at private ranches and resorts in the interior, where the descendants of once proud farming and ranching families wait on their tables or scrub their floors. As ambitious young people move out, entire regions enter an economic death spiral, characterized by an aging population, a shrinking tax base, and contracting public and private investment.

Meanwhile, inequality is growing on the coasts themselves. The 2000 census revealed a startling drop in median income in New York City, the result of depressed wages

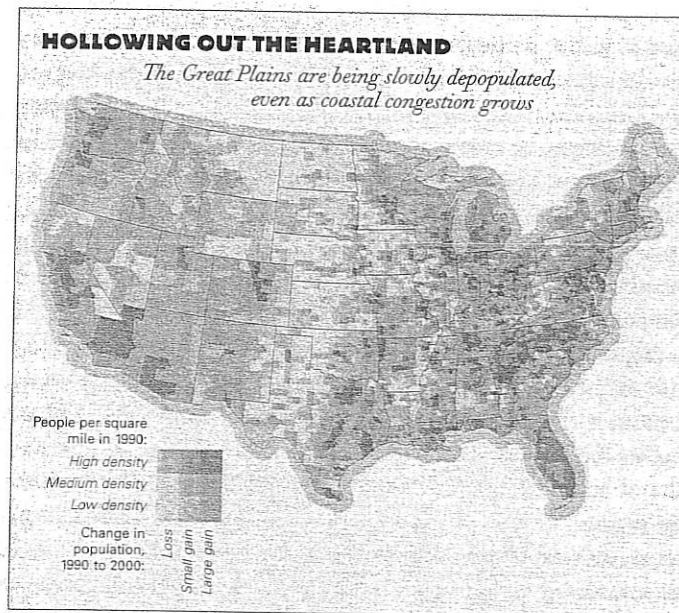
in neighborhoods in Brooklyn, the Bronx, and Queens where the immigrant population has grown the most. The census revealed a similar phenomenon in other northeastern cities and in southern California—also areas of high immigration. Even if wages in densely populated cities and states were not being driven down by mass immigration, crowding would inevitably raise both real-estate prices and the cost of living—to the detri-

ment of working-class Americans and the poor.

The nightmarish result might be an America in which the same wealthy elite lords it over both a largely nonwhite proletariat of maids, nannies, gardeners, and janitors in the coastal cities and over a mostly white working class of janitors, dude-ranch employees, and tourist-trap workers in the interior. This, in turn, might produce a hardening economic and racial hierarchy or even a class war. Whatever the outcome, the American dream of a middle-class society might be threatened.

The heartland needs people—and many Americans on the coasts need affordable housing. Why not bring them together?

Imagine a federal program that would help poor and working-class Americans to move not from crowded cities to suburbs in the same general area but from crowded states to low-density states where homes are cheaper and the general cost of living is lower. Compare the proportion of homes that a median-income family can afford in Kansas City (82.1 percent) with the number in Boston (51.3 percent), New



York City (42.1 percent), Los Angeles (40.2 percent), and San Francisco (10.3 percent). The people who moved would not be the only ones to benefit financially. If the coastal areas did not replace those lost workers with migrants from elsewhere in the country or the world, wages there might rise as the labor market grew tight; and financial barriers to home ownership would decline even in big coastal cities.

Today only about six percent of America's land is residential (urban, suburban, and rural). About 20 percent is farmland, another 25 percent is rangeland, and the rest is wilderness and woodland. The United States grows far more food today than it did in 1954—on about three quarters the acreage. Since 1950, even as agricultural production has increased by more than 100 percent, land has been taken out of agriculture eight times as fast as it has been consumed by suburban development. Much of that abandoned farmland has gone back to forest, particularly in the Northeast. In the twenty-first century most of the land that is liberated from unnecessary agriculture can continue to be restored to wilderness—prairie, forest, or desert—even if a significant portion is reserved for new, low-density housing for migrants from the crowded coastal states.

The federal government subsidizes many farms and ranches that should have been shut down long ago. At best, farm subsidies provide life support for comatose communities. The government is planning to spend at least \$171 billion on direct farm subsidies alone over the coming decade. In much of the continental interior this money would be better used to promote a combination of service and manufacturing industries, as part of an ambitious economic-development program for the region.

Washington should also phase out the roughly \$2 billion in annual irrigation subsidies to western agribusinesses—of which almost half is used for surplus crops. Subsidized irrigation is rapidly depleting the High Plains aquifer under Texas, Oklahoma, New Mexico, Kansas, Colorado, South Dakota, Wyoming, and Nebraska, which now provides about 30 percent of the groundwater used in the United States. The experiment with agriculture in the semi-arid Great Plains from the late nineteenth century onward was a mistake; it produced the Dust Bowl during the Depression and today's regional demographic decline. Cutting off such subsidies would not only end the western water wars but also drive agriculture eastward to states like Illinois and Iowa, where water is abundant and renewable. Within those states market pricing for water would encourage crop diversification and technological innovation in agriculture. Residential and industrial use, not agricultural use, should be the priority of water policy in the Great Plains and the desert and Mountain West, including major portions of California and Texas. And diverting water from agriculture to industry has the potential to generate far more jobs: according to the U.S. Geological Survey, for example, the same amount of water that supports a sixty-acre alfalfa farm with only two workers

could support a semiconductor factory with 2,000 workers.

The money saved by reducing direct and indirect agricultural subsidies could help to pay for a new high-tech infrastructure in the American heartland. All too many rural areas lack, for example, high-speed broadband access. The federal government, which subsidized the railroad in the nineteenth century and the electric-power grid and interstate highways in the twentieth, needs to build a transcontinental infrastructure once again. A hydrogen-based transportation system might be constructed from nothing in many rural areas, which would be spared the transition costs necessary in developed regions. And the government could encourage an air-taxi system, such as James Fallows has proposed in this magazine (see "Freedom of the Skies," June 2001 *Atlantic*), in which thousands of small regional airports would supplement our major hubs, potentially turning dying small towns into new centers of commerce and culture. An "interstate-skyway system" might be to America in the twenty-first century what the interstate-highway system was in the twentieth.

Rural Kansas will never be as scenic as San Francisco, or as crowded with libraries as Boston. But a post-agrarian heartland would be a nice place to live for the children and grandchildren of many of today's struggling coastal families. Fortunately, most jobs in the service economy can be performed anywhere. By 1997, 39 percent of Great Plains farm owners were already designating their main job as "other," rather than "farmer," on their tax returns. By the middle of the twenty-first century the archetypal Plains dweller might be a telecommuting professional.

Thomas Jefferson's idea that population dispersal would promote economic and social equality was shared by Abraham Lincoln, who signed the Homestead Act to provide western land to settlers from the East, and by Franklin Delano Roosevelt, who in 1925 expressed admiration for Canada's policy of seeking "distribution of [its] immigrants throughout every portion of Canada." By means of rural electrification, interstate-highway construction, tax benefits for homeowners, and the nationwide distribution of military plants and government contracts, FDR and his successors made it possible for immigrant slum dwellers and poor tenant farmers to become today's home-owning suburban majority.

In a second inland movement, wired professionals and well-paid service workers might make new lives in wide-open spaces that are slowly reverting from monotonous expanses of wheat and corn to wilderness. The first wave of heartland settlement was in the long-term perspective a failure, with consequences that are evident today. The high-tech pioneers of the twenty-first century, unlike their agrarian predecessors, may be able to reconcile the myth of the heartland with the American dream. ▀

Michael Lind, a senior fellow at the New America Foundation, is the author of Made in Texas: George W. Bush and the Southern Takeover of American Politics (2002).