



A New Vision for Nebraska Trails

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Above: The former Cowboy Line west of Gordon. This right-of-way, owned by the Nebraska Game and Parks Commission, accommodates the Nebkota short line railroad and will include future rail-with trail development.

Previous page: Chimney Rock, one of the landmarks of the Oregon Trail.

A New Vision for Nebraska Trails

Nebraska's experience shows that trail development has many dimensions. While trail and pathway development once occurred almost entirely within parks, the many benefits of linking places and people together have become more apparent. Between 1994 and 2004, Nebraska has become a leader in both the length and scope of its trail system. The state has made major progress toward the completion of America's largest rail-trail conversion, the Cowboy Trail; completed a number of major regional trails that connect communities together along historically vital and scenically beautiful routes; and, perhaps most importantly, expanded or built trails within towns and cities that enhance the everyday life of many citizens. The state's trail system is building bridges, whether literally as part of the Lied Platte River Bridge at South Bend and the planned Missouri River Crossing at Omaha, or figuratively, connecting towns and people with each other, their activity centers, and their natural settings. This plan builds on the work of the past to refine the vision for Nebraska trails presented by the original Network of Discovery plan and implemented through the efforts of many people in the state.

Principles of Trail Development

Nebraska's trails system should follow nine basic principles:

1. The system should be statewide. Much of Nebraska's population is concentrated in the urban east and along the Platte River Corridor/I-80 corridor. Yet, Nebraska has rightly remained true to the concept of a statewide trails system, providing opportunities for all parts of the state. A statewide network fosters contacts among all Nebraskans and helps visitors appreciate the state and its varied landscape and communities at a slower, more appropriate pace. Moreover, the multiple benefits of a trail system should continue to be available across Nebraska.

2. The system should benefit a wide variety of users. Pedestrians and bicyclists are, and probably will continue as, the dominant users of trails. Yet, appropriate quality facilities should be provided for a wide variety of users and constituencies, from equestrians to off-road vehicle enthusiasts, from in-line skaters to canoeists. Trails can serve all types of people, with many different interests and capabilities – seniors, children, families, people with disabilities, rural residents and city dwellers, visitors and tourists. Indeed, in the future, new user groups and requirements are likely to emerge.

3. The system should have multiple benefits. Recreation and physical activity continue to be the fundamental values of trail development. We have become increasingly aware that health and physical activity benefits are no longer just "amenities" – reducing the cost of public health is critical to the economic survival of our state. America has identified obesity as one of its major public health problems, and the links between inactivity and poor health are increasingly clear. Yet, trails have benefits beyond recreation and health. These benefits and roles for trails include community transportation, education, family experience, safety, and economic development.

4. The system should create economic opportunities. Trails encourage people to visit areas new to them, creating opportunities that both enrich the lives of users and can help build local economies. Whether walking in the steps of Lewis and Clark along the Steamboat Trace Trail or traveling along the Cowboy Trail, trail users need supporting services, producing niches for new and expanding businesses. Trails can create economic opportunities for small towns, Indian reservations, rural regions, and large cities alike. But in addition to new business opportunities, trails are also increasingly important to the efforts of our communities to attract residents and investments. The success of the national trail movement has caused people to expect their own communities to provide a quality trail system.

5. The system should provide many levels of experience. Nebraska's history and geography are both rich and subtle – a story of courage and persistence, and of many people's interaction with the land. A trails system should be experiential,

Right: The MoPac East Trail between Lincoln and Wabash. This trail, owned and managed by the Lower Platte South Natural Resources District, will eventually connect to the Lied Platte River Bridge, and is part of the system that will connect Lincoln to Omaha.

helping to weave recreation, environment, education, history, and communities together into a rich tapestry of meaning.

6. The system must be strategic and sustainable. In the early years of the twenty-first century, governments at all levels face serious financial limitations. While these limits affect capital development, the operational costs of trails must also be considered. Trails that are neglected or deteriorate because of lack of maintenance funds serve no one, and waste resources. Our system must be strategic and focused to areas that will most efficiently meet both user needs and the overall goals of a statewide trail system. The 1994 Network of Discovery plan identified a comprehensive range of trail opportunities. This plan takes advantage of the wisdom and lessons of a decade to propose a more focused, strategic system.

7. The system should build on and enhance existing networks and efforts. Nebraska's remarkable progress in trail development during the past ten years is the result of the efforts of many people, both inside and outside of government. Nonprofit trail development groups such as the Great Plains Trail Network and the Eastern Nebraska Trail Network have worked tirelessly to expand trails in the state, and have helped preserve some of the region's most distinctive corridors. The Nebraska Department of Roads, Game and Parks Commission, and Department of Economic Development have been strong and effective administrators, developers, and promoters of trail programs. Local and county governments and Natural Resources Districts have been the central agents of Nebraska's trail programs. During the 1990s, two other major initiatives have emerged – the Nebraska Byways program and the growth of Resources Conservation and Development Associations. These initiatives have created regional partnerships for tourism and economic development, focused on both the character of communities and the natural environment. All of these agencies form a strong foundation for both the continued development of trails in the state and the consolidation and improvement of previous efforts.

8. The concept of trails and pathways should expand the definition of trails to incorporate a variety of facilities and contexts. In Nebraska, development efforts have focused



largely on exclusive, multi-use trails – off-road facilities that are usually hard-surfaced in urban contexts and surfaced with granulated stone in rural settings. However, many of the functions that trail and non-motorized transportation systems are asked to provide require a wider range of facilities. For example, pedestrian and bicycle transportation in towns and cities often require the shared use of roadways; streets and public right-of-ways function as potential “trails” in these settings. Trail design may also need to adapt to different contexts and roles. High-volume trails in metropolitan areas may have different design requirements from more sedate trails in rural areas or small towns.

9. Trail development should recognize and address the various perspectives and concerns of adjacent property owners. Important research by Donald H. Greer (Nebraska Rural Trails: Three Studies of Trail Impact; October, 2001) revealed very different perspectives and reactions to trail development on the part of community and rural residents. In general, community residents support trail development and perceive positive trail impacts, while many rural residents remain opposed to trails that run adjacent to their properties and believe that trails have increased external effects. The Greer study measures perceptions rather than quantities. However, it points out a very important fact – trail proponents face continued lack of acceptance and, sometimes, active opposition by many rural property owners. Future trail development efforts should address these issues by increasing communication with landown-

ers, focusing rural trails in areas of strategic importance, and building in features that address rural owner concerns.

The statewide trails plan should be dynamic, growing and changing with time. Some proposed trail segments will change: new trail opportunities will emerge, while others may disappear. New ideas and exciting possibilities will develop. The plan should establish a framework for the planning and development of trails. The ideas and actions of people interested in and committed to learning and promoting the continuing story of Nebraska will add changing colors to the canvas of a dynamic trails system.

Benefits of a Trails System

These general principles guide the development of an evolving trail concept for Nebraska. We can further refine this concept by considering the benefits of a trails system, which include:

- Recreation.
- Health and Physical Activity.
- Transportation.
- Economic and Community Development.
- Improved Community Image and Quality.
- Historical Interpretation and Linkages.
- Environmental Education and Preservation.
- Corridor Conservation for Multiple Uses.

Recreation

Improved recreation is usually considered the central benefit of a state trails program. Thus, trail requirements are often defined in relation to user groups: pedestrians (including walkers and runners), bicyclists, equestrians, skiers, canoeists, off-road vehicle users, and others. Recreational benefits attract people to the trails system. While a great trails program enriches the recreational experience by adding other dimensions, the foundation for a rich, multi-level network remains outdoor recreation.

Trails-related activities remain among the most popular forms of recreation in the state, especially because they can be done at the convenience of the user. These activities can be enjoyed individually or in families and social groups by people of all ages and abilities. Trails provide recreation for many people at relatively low cost.

The 2001 Nebraska Annual Social Indicators Survey (NASIS), conducted by the University of Nebraska's Bureau of Sociological Research to update the Statewide Comprehensive Outdoor Recreation Plan (SCORP), underscores the growing popularity and need for trail-related facilities. Recreational walking is the most popular single recreational activity in the state, with 53.3% of the NASIS sample reporting participating in the activity at least 35 days during the year, and 74.3% report participation on at least 11 occasions. Only 12.4% of Nebraskans reported not participating in recreational walking during 2001. About 10% of the sample participates in bicycling for at least 35 days, and 21.1% for at least 11 days. Participation in recreational walking and bicycling have grown slowly during the last six years. Other current surveys, such as the 1998 Nebraska Health and Human Services survey of hikers and cyclists, indicate that recreational walkers and runners are exercising more frequently and for longer periods. The growth of recreational walking is clearly related to the growing popularity of community trails, which are generally closer to people and accommodate the shorter distances traveled by pedestrians. Other high-ranking trail-related activities include off-highway vehicle riding and boating.

Trail-related recreation is especially important because it is within the reach of people of all abilities and can be done at the convenience of the individual participant. Team sports require schedules and organization and sometimes favor athletically gifted individuals and families with sufficient financial means; fitness centers require the means to join them and the motivation to make the trip; and recreational programs for young people clearly require youth. Trails however, appeal to everyone from gifted athletes to the majority of people who are looking for a nice place to take a walk, ride a bike, or spend time together with family and friends.

TRAIL USERS OPINIONS IN LINCOLN

"Perhaps the most exciting aspect of the trail census was the personal testimonials offered to the census takers. Many users on all five trails stopped to chat, and some reported how wonderful the trails were for walking, for commuting to work, and for recreation.

Descriptive words were wonderful, terrific, enjoyable, great and beautiful. A woman who walks the trail every day said she didn't know what she would do without it. Others said that we need more trails."

*-Joan Dietrich
Great Plains Trails Network
Summer, 1992*

HEALTH AND THE DESIGN OF CITIES

People who live in more sprawling areas generally weigh more and are more likely to have high blood pressure, according to a study that appeared in the September, 2003 edition of the American Journal of Health Promotion.

"Researchers are finding that sprawl and community design have a direct impact on our health," says Michael Greenberg, PhD, associate editor of the American Journal of Public Health.

"This study found that as the degree of sprawl increased, so did the odds of being obese or having high blood pressure," says Reid Ewing, PhD, lead author of the study and professor at the National Center for Smart Growth, University of Maryland. "If future research points in the same direction, curbing urban sprawl in favor of compact, walkable communities will become an important strategy for curbing waistline sprawl.

*-American Public Health Association
August 28, 2003*

Health and Physical Activity

Improving the health of Nebraskans in particular and Americans in general is an important goal. Better health means a better quality of life for citizens and their families. The Surgeon General recommends 30 minutes of a moderate physical activity, such as walking, for adults and 60 minutes for children on five or more days a week (Roper, Kraft, Killingsworth, Mofson, Starrett, Health and Smart Growth, February, 2003). People of all ages can enjoy trails on the spur of the moment, by themselves or with others, and with a minimum of equipment. However, despite the popularity of sports in our state and the continued investment in recreational facilities, more people are overweight and obese than ever before. We are gradually growing less fit, and this is becoming an increasing cause of alarm. Experts are increasingly calling obesity America's number one public health problem.

Activity Levels, Obesity, and Health

The health benefits of physical activity are well documented and understood. Regular participation in physical activity is associated with an overall reduction in mortality by reducing people's risk of heart attack, colon cancer, diabetes, and high blood pressure, and may also reduce the risk of stroke. It also helps with weight control, contributes to healthy bones and joints, and reduces or minimizes incidence of a wide variety of illness and symptoms (Centers for Disease Control, Physical Activity and Good Nutrition: Essential Elements to Prevent Chronic Diseases and Obesity, 2003). In addition, research over the last ten years has directly linked overweight and obesity to a wide variety of serious health problems. According to recent research funded by the American Cancer Society, there appears to be a positive association between body weight and cancer. Findings indicate that as body mass index (BMI) increases, cancer risk also increases. In fact, the study data estimate that excess weight may account for as much as 14% of all cancer deaths in men and 20% in women (Calle, The New England Journal of Medicine 2003; 348).

Despite the well-documented benefits of a physically active lifestyle, a large proportion of our nation's population does

not engage in enough physical activity. Recent national surveys suggest that 60 percent of American adults do not get enough physical activity to provide health benefits. (CDC, *ibid.*) The high prevalence of physical inactivity in the United States places a significant burden on the public's health. It has been estimated that each year over 300,000 deaths in the United States are attributable to a combination of sedentary lifestyles and unhealthy eating (US Department of Health and Human Services, Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity, 2001). In 2000, total costs attributable to obesity – including direct medical costs and indirect costs due to losses in productivity and wages – were estimated at approximately \$117 billion (Wolf, *Obesity Research*, Volume 6, Supplement 1, 2001).

The lack of safe and accessible recreational opportunities affects public health both by limiting physical activity and diminishing social interaction and a sense of community. In his book, *Bowling Alone*, Harvard University Public Policy Professor Robert Putnam defines "social capital" as stocks of social trust, norms, and networks that people draw upon to solve common problems. He finds that decreasing social capital contributes to declining health, and contributes to social isolation, depression, and other emotional and mental health problems. (Putnam, *Bowling Alone: The Collapse and Revival of American Community*, 2000).

Fortunately, the human toll and the economic costs of inactivity are avoidable. The Surgeon General recommends at a minimum that Americans should engage in moderate levels of physical activity for 30 minutes a day most days of the week. The Federal Government recognizes the need for physical activity and recently launched the "Healthier U.S. Initiative" campaign designed to educate and inspire Americans to be more physically active. Trails figure prominently in the fight against obesity and inactivity. The National Center for Chronic Disease Prevention and Health Promotion strongly promotes the positive impact trails can have on the overall health of their users. Some recent studies have also considered the link between city development and land use patterns and the health of Americans, suggesting that development patterns that cause us to rely on automobiles as our primary, and often exclusive

form of transportation, dramatically decrease overall physical activity. Trails provide a supplementary transportation system that allows us to get to places under our own power.

Health in Nebraska

According to the Nebraska Health and Human Services System, the estimated annual economic impact for selected chronic diseases in Nebraska, considering both direct and indirect costs, is greater than \$2 billion for cardiovascular disease, \$950 million for cancer and \$600 million for diabetes.

Physical activity levels among Nebraska residents continue to be disheartening. According to the 2000 Nebraska Behavioral Risk Factor Survey, about three in every four (72.9%) Nebraska adults aged 18 years and over reported not engaging in sufficient levels of moderate or vigorous physical activity during their leisure time. In addition, approximately three in every ten Nebraska adults reported not engaging in any leisure time physical activity in 2000, an increase since 1996. When comparing Nebraska to the nation and surrounding states, physical inactivity during leisure time appears to be a cause for great concern. While inactivity levels among Nebraska adults is equivalent to Iowa, Kansas, and Missouri, they are significantly higher than those in the nation as a whole or in the neighboring states of Colorado, South Dakota, and Wyoming. These problems of inactivity are also found among the state's youth. According to the 2001 Nebraska Youth Risk Behavior Survey, over one in four (26.3%) high school students (grades 9-12) reported not engaging in sufficient levels of moderate or vigorous physical activity.

Physical inactivity and poor nutrition have led to an epidemic increase in overweight and obesity among Nebraska residents. In particular, obesity among Nebraska adults increased 83% between 1990 and 2000. In addition to the 21% of Nebraska adults identified as obese, 38% were identified as overweight but not obese. This indicates that about three of every five Nebraskans of age 18 and over, or about 750,000 people, are either overweight or obese. This places Nebraska 20th among the states in percentage of its adult population that are overweight and obese.

While obesity among Nebraska adults has reached epidemic proportions, the percentage of overweight youth in the state is also a cause of great concern. According to preliminary non-probability sample results from the 2001/2002 Nebraska youth height and weight data collection project (sample size of 6,057 individuals), 16.3% of K-12 grade students were identified as overweight, and an additional 15.8% were considered "at risk for overweight." This indicates that about one-third of Nebraska K-12 students were either overweight or at-risk, based on actual weight and height measurements taken in Nebraska schools.

Improved Health through Trails

It is generally accepted that physical activity is related to better individual health. Federal, state and local health agencies also have repeatedly proven that physical activity rates in the U.S. are dangerously low, and many in the health community have begun promoting trails and other such facilities as one answer to the problem. Indeed, research indicates that two of the main reasons given for not exercising are "lack of structures or facilities (such as sidewalks and parks) and fears about safety." (Jackson and Kochtitzky, *Creating a Healthy Environment: The Impact of the Built Environment on Public Health*, 2001).

Several studies have been conducted that show the development of trails, and their proximity to the users, appears to increase the rate of regular physical activity. The Center for Disease Control's Web publication, *Promoting Physical Activity through Trails*, reports that "there is now scientific evidence that providing access to places for physical activity increases the level of physical activity in a community." In our own state, a study by the Nebraska Department of Health and Human Services indicated 29 percent of people with access to a trail believed their proximity to the trail caused an increase in their level of physical activity. The CDC's Task Force on Community Preventive Services recommends creating or enhancing access to trails and other places for physical activity. Clearly, health and wellness organizations and trail advocates have common interests, and are natural allies for the development of these facilities.

Right: The Cottonmill Trail in Kearney. This trail connects Cottonmill Park, the University of Nebraska at Kearney campus, and the busy 2nd Avenue commercial district. It will eventually extend to Ft. Kearny State Recreation Area part the Great Platte River Archway Monument.

Exercise and the Transportation Environment

Most Americans do not meet the minimum federal physical activity recommendations, and this sedentary behavior coincides with more time spent in automobiles. The number of trips the average American adult takes on foot each year dropped by 42 percent from 1975 to 1995. Meanwhile, the time spent in traffic has increased 236 percent since 1982. The number of vehicle miles traveled in passenger cars has increased by 250% between 1960 and 1997, the result of both more dispersed land use and development patterns and changing behaviors in the population (US Department of Transportation, Bureau of Transportation Statistics, 1999).

In one of the first population-based, comprehensive studies to address a variety of environmental and policy determinants of physical activity; neighborhood characteristics including density, perceived safety levels, presence of sidewalks, and enjoyable scenery were cited by survey respondents as affecting their physical activity levels. (King et al, "Personal and Environmental Factors Associated with Physical Inactivity among Different Racial Ethnic Groups"; Health Psych 2000). According to the Centers for Disease Control and Prevention, existing studies support the hypothesis that city design influences levels of walking and bicycling, and support strategies that retrofit existing towns and shape emerging communities in ways that encourage physical activity.

Individuals must choose physical activity, but community features and design can make that choice easier. Lack of time or access to convenient outlets for healthy transportation and recreation opportunities are reasons commonly cited by all populations as barriers to regular activity. In Nebraska, for example, 13.5% and 17.2% of Nebraskans surveyed indicate that they would bicycle or walk more, respectively, "if they had the time". (NASIS 2001). Communities can use trails and greenways as the tools to help make exercise more convenient and neighborhoods more conducive to routine physical activity. Integrating physical activity into the fabric of routine life can be done by:

- Using trails and greenways as tools to provide alternatives



to the car for some routine trips. These include connecting neighborhoods, business districts, schools, and other activity centers.

- Building trails and greenways through neighborhoods and along rivers and other natural landscapes to create attractive and accessible places for walking, running, bicycling, and other activities.
- Connecting parks and playgrounds with trails and greenways to create a network of recreational areas.

Quantifiable Benefits of Trails

Trails and greenways create healthy recreation and transportation opportunities by providing people of all ages with attractive, safe, accessible and low - or no - cost places to bike, walk, hike, jog or in-line skate. In doing so, they help people to engage in physical activity. A Saint Louis University School of Public Health study of 1,296 adult residents of southeastern Missouri demonstrated that trail availability significantly increases physical activity (Brownson, et al., "Promoting Physical Activity in Rural Communities" in American Journal of Preventive Medicine, April, 2003). The study found that in communities where more walking trails had been built, nearly 40% of people with access had used the trails and more than 55% of trail walkers had increased their walking since beginning to use a trail. Walking is the most common physical activity among

the general population, especially among older persons and racial and ethnic minorities.

The Saint Louis University researchers also found that women were more than twice as likely as men to report that they had increased the amount of walking since they began to use the walking trails. Similarly, lower income groups were more likely to report increased walking because of trail use than higher income persons. Notably, persons who were not regular walkers were more likely to report increased activity due to trail use than were regular walkers. This suggests a special benefit of trails in modifying the behavior of people at the highest risk for injury and chronic disease.

Donald Greer's study of trails in Omaha indicated similar beneficial effects of living near a trail. The Greer study indicated that about 60% of people living near an urban trail used the facility on at least a weekly basis. (Greer, Omaha Recreational Trails: Their Effect on Property Values and Public Safety, June, 2000)

The Economic Dimension of Better Health

An unhealthy population is a growing economic liability for the state. The most rapidly growing segment of Nebraska's state budget is Medicaid and Medicare expenditures. These explosively growing costs are a major factor creating large budget shortfalls. As the population ages and becomes more susceptible to the problems of growing older, these costs are likely to increase further. A healthier and less disease-prone population will slow the growth of health care costs and may be a critical prerequisite for an economically sustainable state government. Trail and pedestrian system development, creating the facilities for physical activity that are most immediately available to the most people, will be especially important to Nebraska's economic viability.

Transportation

Trails and non-motorized transportation systems play an increasingly important transportation role in Nebraska communities. Towns in the state that have developed trail master



Left: A pedestrian bridge in Sutherland provides safe access for pedestrians over the Union Pacific mainline and US Highway 30.

plans often place as high an emphasis on basic transportation functions as on the recreational roles of trails. These systems provide mobility and independence to people who cannot drive, such as children traveling safely to school, swimming pools, or sports facilities. In Blair, for example, the city's initial trail system increment is designed to provide students with a safe route to school from the growing northwest part of the city. In Sutherland, a pedestrian bridge over the Union Pacific Railroad and Highway 30 corridors also provides safe transportation to school. From a national perspective, a coalition of organizations, including the League of American Bicyclists, are sponsoring a National Safe Routes to School program, encouraging the development of trails and other pedestrian and bicycle facilities for their benefits in providing children with safe paths to schools and other community features.

Trails also provide an energy-saving, non-polluting mode of transportation to shopping, workplaces, and other community activity centers. Lincoln's trail system, featuring trails on former railroad rights-of-way that radiate from Downtown, encourages work trips by bicycle; its bicycle culture was celebrated by the 2003 public art project, the Tour d'Lincoln. New trail development in Omaha is also encouraging commuting by providing direct service to major office and employment centers. The proposed Missouri River Crossing will make bicycle commuting between Omaha and Council Bluffs a feasible and even preferred transportation alternative. National research indicates that for commutes up to seven miles in length, bicycle



Above: The Katy Trail and a bed and breakfast in Rocheport, Missouri. The trail and the businesses that have sprouted around it have transformed this once economically depressed village into "the #1 daytrip destination from Kansas City."

transportation compares favorably with automobiles in city settings. Legislation is pending in Congress to extend the transportation benefit in the tax code to bicycle commuters.

Community and regional trail systems combine transportation with fitness, environmental responsibility, fun, and even spiritual needs. A rural church in Walton, Nebraska, schedules a Sunday "bikers' service," to which congregants from Lincoln ride along the popular Mopac East Trail. Trips to recreational facilities such as community centers and sports complexes provide young people with greater mobility and independence and their parents with greater peace of mind about their safety, while saving excess automobile trips. Trails and pedestrian transportation must be integrated into a balanced transportation and land use planning program for cities and towns.

Automobiles and Physical Safety

Transportation safety is another dimension of trail and pedestrian facility development. Nationally, pedestrians are 36 times more likely to die in a collision than drivers and 11 percent of all traffic fatalities are on foot. Studies show that places that have "been built-up since the 1950s and are dominated by subdivisions, office parks, and high-speed roads that are designed for fast automobile travel" are the most dangerous for pedestrians.

In 2000, 378 bicyclist/motorist accidents occurred in Nebraska, resulting in two fatalities. The state also experienced 489 pedestrian/motorist accidents in 2000, resulting in 22 deaths. Placing pedestrians and bicyclists on roads without adequate accommodations increases hazards of injuries and deaths from accidents. It also discourages people from attempting to use "human-powered" modes of transportation. Street and community design play important roles in transportation choices and behavior.

Economic and Community Development

The popularity of trail-related activities suggests that an innovative and strategic trail system can become a substantial force for economic development in both urban and rural set-

tings. Trail-related businesses can draw from both a local and regional market of trail users, and a tourism market. Tourism is the state's third largest earner of revenue from sources outside the state, injecting over \$2 billion annually into the Nebraska economy. From a national perspective, trails and the communities along them have a demonstrated ability to attract visitors to a region.

Economic development theory suggests that growth in retail and service sectors occurs by:

- Preventing local consumer dollars from slipping beyond the boundaries of the community, thereby improving its "balance of trade."
- Providing new services and features that encourage greater local and regional consumer spending.
- Capturing consumer expenditures that would not otherwise take place in the community.

The state trails network, if integrated with other attractions and systems, can encourage Nebraskans to explore their own state and spend more recreation dollars within its boundaries and communities. This is a valid strategy in both good and slow economic times. It is particularly compelling during a period of economic downturn, offering travelers great experiences for relatively little money. In addition, the increased cost and inconvenience of traveling helps create opportunities for more localized tourist experiences. Increasing internal tourism provides all parts of the state with substantial economic benefits. In addition, trail-related tourism can also attract new dollars into the state and its regions, adding to the growth of local economies.

The Network of Discovery plan of 1994 reviewed several well-known examples of regional economic development created by trails, including the Elroy to Sparta State Park Trail in Wisconsin, Iowa's Heritage Trail, and Missouri's Katy Trail State Park. All three trails have experienced continued development. Use of the Elroy-Sparta Trail has increased by about 20% during the 1990s. The Heritage Trail is being extended

directly to Dubuque's burgeoning Mississippi Riverfront, adding dramatically to its recreational attractions. The Katy Trail, now extending for about 225 miles from Clinton to St. Charles, Missouri, has sprouted literally hundreds of businesses. Rocheport, once a dying village in the center of the state, was recently named "the #1 daytrip destination from Kansas City" by readers of the Kansas City Star. This town of 200 now has three good restaurants, a winery and bistro, three bed and breakfasts, a bicycle shop and two bookstores – all effectively created by the trail. Closer to home, Southwest Iowa's Wabash Trace Trail has generated increased business for restaurants and ice cream shops along the route.

The Greer study indicates that Nebraska regional trails have begun to have some impacts on businesses, although full benefits still seem unrealized. A survey of businesses along the MoPac East, Cowboy, and Oak Creek Trails indicated that:

- 55.7% believe that the trails have had at least some positive impact on the quality of their communities.
- 38.3% are satisfied with the effect of the trail adjacent to their business, compared to 9.8% who express dissatisfaction.
- 63% report at least a slight positive impact on their businesses during the last two years, and 68% during the last five years.
- While individual sample sizes are small, most respondents along the MoPac East, the best established of the three trails, were satisfied with the effects of the trail.

The Nebraska trail system is generating some individual business enterprises as well:

- The Walton Trail Company, along the MoPac East Trail, featured in the 1994 plan, continues to be a popular oasis along that regional trail, providing a unique mixture of food, drink, bicycles, and conversation.
- In Valentine, the downtown Comfort Inn, located along the Cowboy Trail, invites trail users to use its facilities, in-



Top: The Walton Trail Company, along the Mo Pac East Trail in the Village of Walton. The store combines sales and repair of bicycles with food service to users of the popular trail.



Bottom: The Comfort Inn in Downtown Valentine along the Cowboy Trail. This hotel provides showers for trail users.

cluding showers right off the lobby. Just to the east, Yucca Dune offers a combination of bicycles, canoes, and other sporting goods, along with expert advice and experience on bicycling.

- In Tilden, Udder Delight, one of the state's most creatively named ice cream stores, has opened partially to take advantage of travelers on the nearby Cowboy Trail (CT). Tilden has also developed a spur trail to bring CT users into the town center.
- In Bassett, also along the Cowboy Trail, the town's Main Street organization has restored a unique gas station as its office, the headquarters of an effort to expand the town center because of its connection to the Cowboy Trail.



Above: Two perspectives on the Linden Place Trail in Omaha. The trail is an integral part of the design of this development and its adjacent office park. Studies of Omaha's urban trail system have found that most residents believe trails increase the value of their neighborhoods.

- Brainard has supported extension of the Oak Creek Trail into its town center to take advantage of business generated by trail users.
- In Kearney, a convenience store received site plan approval for a project along the Cottonmill Trail that features an outdoor deck and rest area for users of the adjacent trail.
- In Omaha, the Chili Greens Golf Course, located along the city's Keystone Trail, paved a spur to its clubhouse, inviting trail users in for refreshments and restroom use. To the north, Crane Coffee is a popular stop for the users of this busy urban trail.
- In Chadron, the Ship Shape Shop combines barbering and bicycling in a dual shop that caters to users of the nearby Pine Ridge Trails.

With strategic development and marketing, the economic potential of Nebraska's trails can be more fully realized. Trails, linking people to resources and connecting communities together, and promoted by cooperative regional marketing, can increase tourism by both attracting visitors and increasing their length of stay. The Nebraska Byways system complements multi-use trails by connecting communities and marketing their various attractions. In a way, the Byways are for motorists what trails are for cyclists and other non-motorized users – corridors that allow people to experience the state at a slower pace. Together, Nebraska's Byways and trails can be the connecting tissue of regional tourism networks.

Improved Community Image and Quality

While trails can encourage economic growth, they can also help Nebraska and its communities market themselves in the competition for new residents and investment. In evaluating sites, businesses often factor in their employees' quality of life. The development of a statewide trails network, creating stronger relationships between communities and the countryside,

can add to the array of positive features that Nebraska offers to residents. A statewide trails system can be a significant part of the "Good Life" for both current and prospective residents of our state. Local trails development similarly improves the quality of life for residents of cities and towns.

There is significant new evidence that trails in Nebraska have significant beneficial impact on community perception. The Greer study of three Nebraska trails and Iowa's Wabash Trace Nature Trail indicates that 68.2% of small town respondents report that the trail has benefited community life and value. About 59% report that the trail increased community pride, and 42% believe that the trail has increased economic opportunity. Interestingly, the two most established trails – the MoPac East and Wabash Trace – posted the highest positive perceptions, at 78.2% and 83.8% respectively. The Valparaiso to Brainard Oak Creek Trail, a trail that was developed under considerable opposition, registered the largest gains in positive perception.

An earlier study by Greer (Omaha Recreational Trails: Their Effect on Property Values and Public Safety, June, 2000) examined the perceived effects of three urban trails in Omaha on community quality and property values. This study indicated that:

- 65% of respondents believed that their homes would be easier to sell because of the trail, and 42% suggested that the nearby trail would increase their home's market value.
- 64% said that the trail positively influenced their decision to buy their house.
- 77% reported that the trail increased their quality of life.
- 59% use the trail at least weekly.

Historical Interpretation and Linkage

Nebraska's history is reflected in its communities and the people who brought them to life. The Game and Parks Commission's State Historical Parks and the programs of the Nebraska State Historical Society, including its stewardship of historic places and administration of the historic marker program, explain the relationships between people and places. Trails, which were so instrumental in the development of the state, are an ideal mechanism for historic preservation and interpretation. They can help describe themes and experiences of Nebraska history - the relationship between Indians and their land, the experiences of travelers on the Oregon Trail as they descended Windlass Hill into Ash Hollow, the solitude of the pioneer Kinkaider in Custer County, and the growth of modern communities. Trails provide an encounter with Nebraska's history that is impossible at highway speeds. Using their interpretive power helps a trails system move beyond recreation to become a Network of Discovery.

Trail development across Nebraska is beginning to explore the rich opportunities that trails present for historical interpretation. Examples include:

- The Cottonmill Trail in Kearney, which connects Cottonmill Park, the University of Nebraska at Kearney, and the city's hospitality district, and will soon extend to the Great Platte River Road Archway Monument and Fort Kearny State Historical Park.
- Interpretive features and displays along the Mopac Trail from Springfield to Louisville. This trail is part of the system that will eventually connect Omaha and Lincoln.
- The completion of the Steamboat Trace Trail between Nebraska City and Brownville, and its eventual connection to the Lewis and Clark Trail Center and the center of Nebraska City.
- The recently completed preservation plan for the Old Lincoln Highway in Elkhorn, including a trail that avoids impact on the highway vista while providing special opportunities for interpretation of the historic roadway.



Environmental Education and Preservation

Trails can help Nebraskans become more aware of the state's unique environments. Nebraska's landscapes, invite reflection and interaction, and provide intimacy with the land. Our varied landscapes, consisting of unique river environments, the Sandhills, the valleys and canyons of the Platte and the Republican Rivers, the incomparable Niobrara Valley, and the rock formations that became the landmarks of westward-bound emigrants, all invite exploration.

Trails provide access to hard-to-reach places in a way that has little impact on the land. For example, the Steamboat Trace traces a path along parts of the historic and scenic Missouri Riverfront that are impossible to reach any other way. Trail corridors can become living laboratories for learning about nature. Along the Steamboat Trace, students at Peru State College have installed markers for various species of trailside flora. These linear greenway corridors also preserve habitat and provide a means for wildlife to migrate. Trails can increase our awareness and appreciation of the natural environment, making us better stewards of the planet.

Finally, trail corridors protect vital wildlife habitats. They maintain bio-diversity in changing environments. While narrow, the linear corridors of vegetation created by trails become the threads that hold fragile or degraded landscapes together. In some cases, they host threatened plant species, such as the western prairie fringed orchid found along the proposed Nor-

Left: Concept for an interpretive park, related to the Old Lincoln Highway and proposed Lincoln Highway Trail near Elkhorn.

TRAILS AND ENVIRONMENTAL STUDY

"Recent studies of bird species utilizing the Mo Pac East Trail being developed by the Lower Platte South Natural Resources District have yielded some very interesting preliminary results. Over 200 species of birds have been documented using the corridor; a significant percentage of nesting birds on this corridor have been neotropical migratory species. While studies on corridors such as railway rights-of-way have only recently started in Nebraska and a number of other states, preliminary findings have shown these often narrow strips of habitat offer high value for many wildlife species, including both mammals and birds."

- Carl Wolfe
Outdoor Education Specialist
Nebraska Game and Parks
Commission

Right: The Ogallala Trail. This community trail connects two otherwise separated parts of the city with each other and Western Diamonds ballfield complex.

folk to Chadron Cowboy Trail. Trail corridors provide islands of habitat in farmed areas for songbirds and other wildlife. Reversion of these corridors to adjacent owners frequently results in the loss of these habitats. Finally, the corridors often provide the only connection or travelway for wildlife species between larger blocks of habitat. In a real sense, trail corridors become transportation facilities for animals as well as people.

Corridor Conservation for Multiple Uses

Like trails, many other public services and utilities such as drainageways, canals, flood control projects such as levees, sewers, electric lines, fiber optics, water mains, and pipelines need linear rights-of-way. Multiple-use trail and utility corridors can reduce the cost of trail development by sharing land acquisition and maintenance costs, by producing revenues through lease arrangements, and by using land efficiently.

Trails acquisition programs, such as railbanking under Section 8(d) of the National Trails Act (discussed in more detail on page 50) can help preserve rights-of-way for multiple uses. These programs allow public agencies and other interested groups or individuals to negotiate agreements for interim trails use of corridors, subject to future restoration of railroad service.

A Concept for a Refined Network of Discovery

This plan seeks to design both a trail system concept and an evolving development process that fulfills the principles and maximizes the potential trail benefits described above. A Network of Discovery (ANOD 1) identified three theoretical approaches to statewide trail system planning:

- A service approach, considering trails to be a recreation facility allocated according to service standards generated by geography and population.
- An opportunities approach, based on taking advantage of available or emerging corridor opportunities, such as railroad abandonments. The purchase and development



of the Cowboy Trail was an example of taking advantage of an emerging opportunity. So too is the recent railbanking and acquisition of the future Homestead Trail, along the former Union Pacific line between Lincoln and Maryville, Kansas.

- A network approach, creating a statewide network that connects points together and makes it possible for people to move from place to place while crossing the state by continuous trails. This approach is analogous to the planning of a statewide road network.

Each of these approaches is compelling, but each also has shortcomings. The service approach is strategic and responds to user demands. But it ignores the development and tourism aspects of trails in beautiful, but relatively remote places. The opportunities and network approaches open up a variety of parts of the state, but are not necessarily focused and strategic enough in periods of tight budgets and conflicting demands. The 1994 plan proposed a system composed of sixteen Resource Corridors – clusters of recreational, environmental, historical, and community features linked together by trails. The Resource Corridors grew naturally out of the clustering of significant features around the state and were designed to:

- Represent a rich clustering of features and resources that reflect the state's geographic, ecological, human, and cultural resources.

- Provide experiences that range from day trips to multi-day excursions, with an emphasis on thematic and regional tourism.
- Provide good access to services and towns, providing users with the support and services that they need to be comfortable and secure in the state's vast landscape.
- Focus on trail development that ties resources together, strategically emphasizing those trails that link special places together and maximize the system's benefits.
- Provide opportunities for cooperative marketing and promotion.
- Be linked into a continuous statewide network.

Trail development after the publication of ANOD 1 in 1994 generally has fallen into three classifications:

- **Community Trails.** These trails represent the majority of post-1994 development and are generally internal to communities or urban areas. They link neighborhoods or parts of cities with community attractions, and often follow such features of the natural or built environments as streams and railbeds. Examples of community trails are the Belt Line Trail in Grand Island between Pier Park and the Central Community College campus; the Cottonmill Trail in Kearney between Cottonmill Park and the Archway; the Field Club Trail in Omaha; and the Rock Island Trail in Lincoln. Some community trails blur the category, and can become so long that they take on regional characteristics. For example, the Keystone/Bellevue Loop Trail extends from Northwest Omaha into Sarpy County and ends at Haworth Park in Bellevue. While internal to the metropolitan area, the trail is over 30 miles from end to end.
- **Regional Trails.** These trails connect discreet communities and travel extensively through rural areas. They link towns with the rural landscape and often have the greatest potential for attracting visitors. Some regional trails

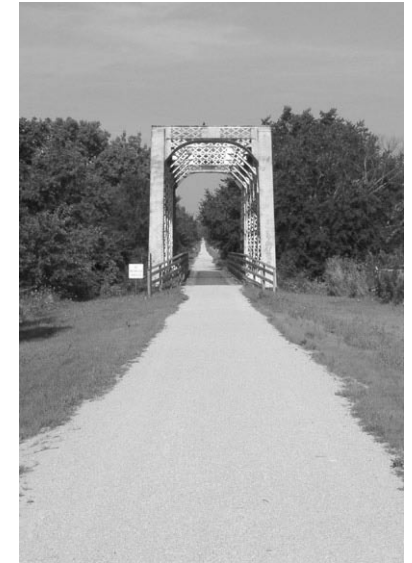


are linked to community trails, particularly in larger urban areas. For example, MoPac East Trail connects to the Mopac Trail in Lincoln, and the Mopac Trail north of Louisville will link to Omaha's 144th Street/Highway 50 Trail. Other community trails, such as the Oak Creek and Cowboy, are "free-standing" and serve both local and visitor markets.

- **Park Trails.** These trails are located within state, regional, or local parks, or other recreational facilities. They may connect to community and regional systems. Eugene T. Mahoney State Park's extensive internal system and the Niobrara State Park Trail are examples of park trails. A variation of this theme are trails that link a park or open space facility to a neighboring community. Examples include recent trail connections between the Nebraska National Forest and Halsey and Ponca State Park and the town of Ponca. Other examples of park trails include Indian Cave Trails, with 20 miles of hiking and cross-country skiing, 10 miles of mountain bicycling, and a 12-mile equestrian loop within this southeast Nebraska state park; Kearney's Yanney Park Trail, connecting a major community park to the Cottonmill Trail; and the Hickman Park Trail in Hickman, linking trails both inside and outside of the park, and tying park features together.

The Resource Corridor concept remains a valid concept for conceptualizing a statewide and regional trails system. The concept of clustering of features and ability to open the "secrets" of Nebraska to visitors helps to satisfy the development,

Left and below: The Oak Creek Trail, a regional facility that links Valparaiso and Brainard. This trail is part of the American Discovery Trail route across the United States.



(Photos courtesy of Lower Platte South Resources District.)

environmental, and social objectives of a statewide system. However, the system needs to be refined further for several reasons:

- The Resource Corridors concept is very heavily focused on regional multi-use trails, and is less sensitive to community trail systems and the needs of such varied constituencies as OHV users. Community trails have proven immensely popular in cities and towns of all sizes, and represent a majority of grants distributed by the Nebraska Department of Roads under the Transportation Enhancements (TE) program. Because community trails are immediately accessible to local residents, they receive the heaviest use and generate the most immediate health and recreational benefits.
- Since 1994, the Nebraska Department of Roads (NDOR) and the Division of Travel and Tourism initiated the Nebraska Scenic Byways program. The nine designated Byways, providing scenic and historic alternatives to Interstate 80, provide a focus for regional tourism and economic development efforts, and can add statewide structure to a refined Resource Corridors system. The incorporation of the Nebraska Association of Resource Conservation and Development Associations (RC&D's) in 1995 and the activation of nine agencies since 1994 has enhanced the regional development framework. RC&D's are regional councils funded by the United States Department of Agriculture to improve local communities, maintain safe water supplies, increase recreational opportunities, and diversify rural economies. They organize partnerships among state, local, and regional agencies, and have implemented projects related to trail development and marketing, as well as efforts to promote the Byway system.
- ANOD 1 included a catalogue of trail development possibilities. However, limits on both capital and operational resources requires a much more strategic focus on the regional and statewide system. It is better to have a focused, well-supported trails system than to have many miles that are underused and poorly maintained.

- It is clearly important to complete and maintain projects to which various agencies or sponsors are already committed. These include such major efforts as the American Discovery and Cowboy Trails, proposed in the 1994 Plan, as well as such recent efforts as the Homestead Trail.
- The system must more clearly include policies for users such as OHV users, snowmobilers, equestrians, and canoeists. While the 1994 plan addressed these users by providing standards, it lacked real policy guidelines that defined needs and recommended implementation techniques.

A New "Network of Discovery:" Contours of the Trail Concept

A refined trail concept for Nebraska, incorporating the remarkable progress and changes of the past ten years, incorporates the following general elements:

- Define and complete development of three "Trans-State" Trails. These include the Cowboy Trail, the American Discovery Trail, and the "Fertile Crescent," a unique four-state trail network that combines the planned Homestead Trail, the Lincoln trail system, the Lincoln-Omaha connection via the Lied Platte River Bridge, the Omaha trail system, the new Missouri River Crossing, and the Wabash Trace Nature Trail into a continuous 200-mile trail of major national significance. A fourth potential trans-state opportunity may emerge along the southern tier of the state, with gradual abandonments of the Burlington Northern & Santa Fe Railroad's Republican Valley route. In 2003, notice to abandon was filed on a segment of this line from Table Rock to Fairbury in southeastern Nebraska.
- Identify and promote development of Priority Regional Trail (PRT) corridors. The PRT corridors trail experiences that cluster important features like the Resource Corridors of the 1994 plan, but which are integrated directly into the Nebraska Byways system. The Byways become the method by which visitors arrive at the regional trails, and the intersections between the Byways and the Priority



Regional Trails become gateway or trailhead communities.

- Establish criteria for PRT corridors that incorporate and enhance previous trail development efforts, but also includes areas of special regional, state, and national significance. PRT corridors should combine local and regional service with reasons and attractions so compelling that they are truly likely to attract visitors. An example is a proposed PRT from Red Cloud to Alma in southern Nebraska, an opportunity opened by current and probable future railroad abandonments. Red Cloud is both a Lied Main Street community and a place of major historic importance as the hometown of renowned author Willa Cather. Alma, at the other end of the PRT, is the host community for Harlan County Reservoir, the state's second largest lake and a major resource for water recreation.
- Provide special assistance to groups attempting to organize around regional trail concepts. Nonprofit and public agencies and user groups have a wealth of information to share and a mutually infectious enthusiasm about trails. This knowledge and desire to help can be harnessed to catalyze trail development efforts in key regions.
- Continue a strong emphasis on community trails, those facilities that are most likely to maximize the potential benefits of trails in the short term. While regional trails must build a market and often travel through lightly populated



areas, community trails respond to the immediate needs of a local market. As such, they will continue to be the backbone of the state's trail development efforts.

- Establish and implement specific policies for the development or use of trail facilities by specialized user groups, including OHVs, snowmobiles, equestrians, and canoeists.
- Fully integrate street and road resources, including Nebraska Byways, low-traffic roads, new highway projects, minimum maintenance roads, and city street networks, into the trail and non-motorized transportation systems.

The detailing of these overall concepts begins with defining the statewide system. The next section establishes the initial PRT corridors by considering a variety of important features that determine the shape, theme, and character of corridors that will have major significance and attraction to users. These corridors, together with the more detailed trail planning components presented later in this plan, distinguish the new Network of Discovery and the vast potential that trails can have for our state in this new century.

Left: The Homestead Trail corridor. This former Union Pacific Railroad right-of-way extends from Lincoln to Maryville, Kansas through Beatrice, and will be part of the "Fertile Crescent" system. An even more ambitious Quad State Trail is proposed that will connect this system to the Katy Trail in Missouri.

Right: Bicyclists on Grand Island's trail system (Photo courtesy of City of Grand Island).

