

IV. INFRASTRUCTURE AND PUBLIC FACILITIES

In this chapter of the Comprehensive Plan, background information is provided on those public and semi-public facilities which provide various services to County residents. These services include parks and recreation areas, water and sewer service, educational facilities, medical facilities, transportation infrastructure, power, communication, and county owned buildings. Infrastructure provides the essential components for residential and commercial health of an area. Locations that have a higher degree of infrastructure and its related amenities tend to also be areas that enjoy growth.

A. Issues Summary

- ? The Rural Water System is interconnected to an adjacent rural water system and several community water systems both in Cottonwood County and in surrounding counties. Many of the Communities have their own water supply, the remainder of the county is served by private wells.
- ? Wellhead protection plans are being developed and can be used by the County to identify sensitive areas for development.
- ? Wastewater treatment facilities are in place for industry and concentrations of population.
- ? Transportation
 - o TH 60 Corridor and Access Management
 - o County Access Management – potentially along CSAH 13, and County Policy of ½ mile access appears to work for majority of the county
 - o 5-year County Road and Bridge CIP's
 - o Ten ton County road network initiative
 - o Transit – Public transit is available
 - o Rail – potential for increased rail traffic which may affect safety.
 - o Aeronautics – local airport is within County
- ? County Facilities
 - o Landfill – sufficient space is available, fees may need to be adjusted
 - o Buildings and Facilities
- ? Telecommunication
 - o Services are not available county wide
- ? Power
 - o Transmission of power and interconnection to the transmission grid.
- ? Educational Facilities
- ? Medical Facilities / Health Care
 - o Timely access to major medical facilities
- ? 911 Emergency System

A.1. Infrastructure Strengths, Challenges and Future Direction

The County Committee identified issues with Infrastructure and Public Facilities in the County.

Infrastructure Strengths

- ? Good transportation network with access to roads, railroads, air and transit.
- ? Water supply service. Rural Water available in the majority of the County.
- ? Educational and medical facilities
- ? Value added processing coupled with availability of water, energy, and raw resources
- ? Within a good distance from large communities and the highway network has made it closer.
- ? Good 911 Emergency System (Law Enforcement, Ambulance, Fire Protection)

Infrastructure Challenges

- ? Rural area access to T-1 line
- ? Wireless service is limited and has reliability issues
- ? Distance from Large Municipalities
- ? Timely access to major medical facilities
- ? Aging infrastructure
- ?

Future of Infrastructure and Public Facilities

- ? A strong education system which also means access the required resources.
- ? Wireless and T-1 access to equalize the economic playing field
- ? Highway 60 as a Four-lane highway corridor
- ? Hospitals and medical facilities in the County with state of the art technology.
- ? Ensure facilities needed for an aging population are adequate, such as long term care facilities.
- ? Infrastructure improvements to maintain and to reflect new or emerging technology and development, renewable energy development and value added products.
- ? A strong 911 Emergency System

B. Water

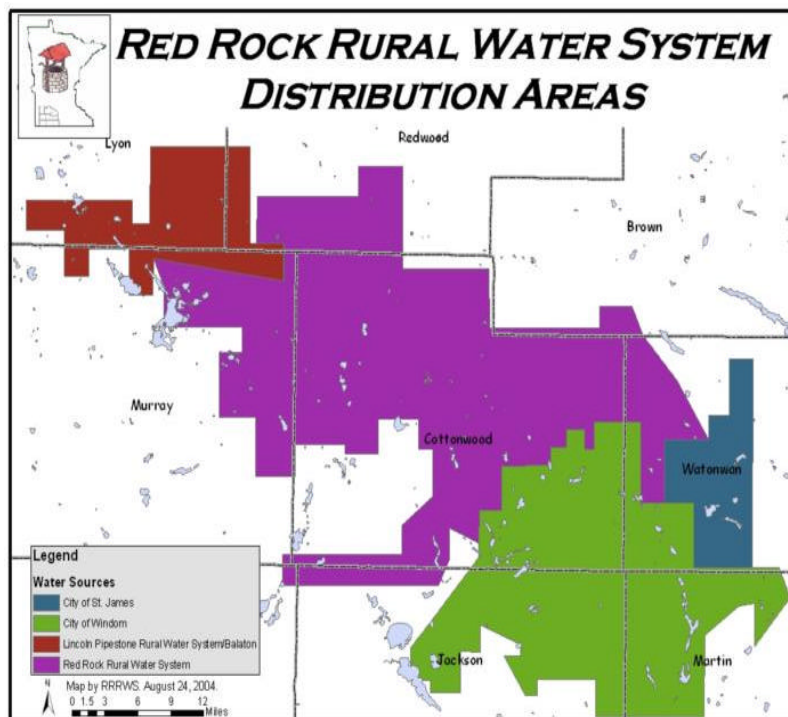
There are six municipalities in Cottonwood County. Water is supplied for rural residents by their private wells, or through the Red Rock Rural Water System. The municipalities of Jeffers, Mountain Lake, Storden, Westbrook, and Windom have their own wells. Both the Windom municipal wells and the Jeffers municipal well work with Red Rock Rural Water for back up supply. Windom supplies Bingham Lake and Ethanol 2000 with water and Red Rock Rural Water supplies the unincorporated community of Delft.

Providers of public water rely on wellhead protection plans to safeguard areas that are recharge water supplies. Land use activities appropriate for these sensitive areas should be considered when land use decisions are made. Wellhead protection is a means of protecting public water supply wells by preventing contaminants from entering the area that contributes water to the well or well field over a period of time (the Drinking Water Supply Management Area or DWSMA). The wellhead protection area is determined by using geologic and hydrologic criteria, such as the physical characteristics of the aquifer and the effects which pumping has on the rate and direction of groundwater movement. A management plan is developed for the wellhead protection area that includes inventorying potential sources of groundwater contamination, monitoring for the presence of specific contaminants, and managing existing and future land and water uses that pose a threat to groundwater quality.

Red Rock Rural Water System (RRWS) and the interconnecting communities wells (Windom, Jeffers), Mountain Lake, Storden, Neuhoof Hutterian Brethren, and Westbrook are in the process of developing plans or are identified for future plan development.

B.1. Red Rock Rural Water

RRWS has taken measures to diversify the water system by interconnects into Lincoln Pipestone Rural Water and with several cities. They are currently working with the Minnesota Department of Health in the development of their wellhead protection plan for the wells. The anticipated completion date is March 2006. There are 593 hook ups to the Water system in Cottonwood County.



B.2. Windom.

The Windom Water Treatment Facility was built in 1998 and has a design capacity of 3.3 million gallons of water per day. The total storage capacity in the two elevated towers is 1,500,000 gallons.

B.3. Mountain Lake.

The City has municipal wells and provides service to residents and businesses in the city and to some homes outside the City Limits. Mountain Lake is not interconnected to the Rural Water System. Protient, a large value-added business at Mountain Lake also has their own water supply.

C. Wastewater Facilities and State Discharge System permits.

The communities of Windom, Mountain Lake, Storden, Jeffers and Westbrook have State Discharge System permits to discharge wastewater. In addition, the unincorporated community of Delft includes a Sanitary Sewer District which is managing wastewater through a newly constructed wetland. The wastewater from Bingham Lake is managed and treated at the Windom plant.

Other significant wastewater discharge permits in Cottonwood County include Protient in Midway Township near Mountain Lake, and Ethanol 2000 by Bingham Lake. The Neuhof Hutterian Brethem Colony also has a wastewater treatment facility located in Mountain Lake Township. Residents not served by wastewater treatment facilities have individual sewage treatment systems (ISTS), which require periodic maintenance and upgrade. When these systems fail, they pose a pollution hazard to water. Care must be taken in development where septic systems are needed to ensure the soils are capable of supporting an ISTS.

Figure 4-1. Permitted Wastewater Treatment Facilities and State Discharge Permits in and near Cottonwood County					
Facility Name	SDS Permit #	Location	Ponds	Average annual flow / day design	Discharge
Jeffers Wastewater Treatment Facility	0039756, Class D	NW 1/4 , SW 1/4 Sec 21, Amboy Twp	two-cell stabilization pond system	70,000, with 223 day storage	controlled dis. to Judicial Ditch #9
Delft Sanitary District (2004 construction)	0066541 Class C	NE 1/4 of NW 1/4 Sec 27, Carson Twp	Constructed westland	5,700 gpd wet weather flow design	continuous dis. to Watonwan River
Mountain Lake Municipal Wastewater Treatment Facility	0021466 Class D	NW 1/4 of Sec 28, Midway Twp.	Three-cell stabilization system	350,000 gpd	Discharge to unnamed creek.
Neuhof Hutterian Brethern Wastewater Treatment Facility	0062588	Section 16 of Mountain Lake Twp	two-cell stabilization pond system	4250 gpd	Controlled periods to unnamed creek to Judicial Ditch 31
Storden Wastewater Treatment Facility (2003 proposed)	0052248 Class B		Three cell stabilization pond system	52,500 wet weather gpd design, 180 detention time	Controlled discharge to County ditch # 38
Westbrook	0025232 Class D	N 1/2 , SW 1/3 Sec 33 Westbrook Twp	Two-cell stabilization pond	150,000 wet weather gpd design, 267 day detention time	Controlled discharge to county tile to JD 18 to Highwater Creek
Windom wastewater Treatment Facility	0022217 Class B	Windom	digester	1,830,000 wet weather gpd flow design	Continuous discharge to the Des Moines River.
Comfrey – < 1/2 mile North of County	0021687 Class C	E 1/2 of SE 1/4 of Sec 32, Bashaw Twp,	digester	50,600 gpd wet weather flow design	continuous dis. to drain tile to Altermatt's Creek
Ethanol 2000, Bingham Lake	0063118	Discharge consists of cooling tower blowdown rate of 44,000 gpd & reverse osmosis reject water at rate of 76,000 gpd discharged to on-site detention pond, tested and controlled discharge to unnamed creek via Co ditch 23			
PM Windom,	0067482	Waste water pre-treatment facility, including ponds, with treated effluent discharged to City of Windom; permit also covers land application of by-product waste streams, storm water management, & ground water monitoring.			
Protient, Mtn Lake (Sec 34 Midway Twp)	0066036	Year-round discharge of reject water from the reverse osmosis system at a maximum rate of 72,000 gpd to a tile to JD 21, then to JD 1			
Windom Coop Association	0064645	A carbon absorption system designed to treat up to 40 gallons per minute flow. Facility is designed to treat pesticide contaminated groundwater from the facility.			
Northern Natural Gas Company	0050041	Northern Natural Gas is responsible for periodic testing of the structural integrity of pipelines used to transport natural gas and / or liquids .			
Northern Boarder Pipeline company	0052329	Northern Border Pipeline Company is responsible for periodic testing of new and existing pipelines used to transport natural gas.			

D. Transportation

A multi-modal transportation system that sufficiently moves people and goods into and out of the county is essential to the economic stability of the county. The transportation system not only allows for easy access to and from areas of interest by the residents of the county, but it also provides a means by which agricultural, industrial, and commercial products can be transported or effectively marketed.

Incorporating the different types of transportation modes is an important part of the transportation plan. The County and its residents depend on the transportation system to reach regional, state, national, and international markets. Not only does the County's transportation system support the movement of vehicles across the county and between cities and points of interest, but it also supplies trucks engaged in local and regional commerce with the ability to efficiently move their goods. Pedestrians, snowmobile riders, and bicyclists are supported with a system of recreational off-road trails paralleling county roads and paved shoulders as well as by a separate system of trails (See Chapter V. Cultural and Recreational Resources for more information on trails).

Changes to the transportation system can have both positive and negative effects. Poor road conditions can negatively effect nearby communities. The economic well being of Cottonwood County lies with its ability to produce, market, and transport basic agricultural products, manufacture goods, as well as with its ability to generate tourism. Potential economic activities or developments may choose to avoid an area with an inadequate transportation network, which would mean loss of business and ultimately the loss of tax base. Alternatively, the expansion or reconstruction of a transportation system could help to improve the economic stability of a nearby community by providing an attractive site for economic development.

D.1. Existing Highway System

The existing highway system within Cottonwood County is a gridiron pattern, and generally follows the basic land survey section lines, with the exceptions where physical characteristics such as lakes and terrain or other considerations provide obstacles and cause deviations in the pattern. Overlaying the basic gridiron pattern is State Trunk Highway 60, which transects the southeast corner of the county and passes through Windom, Bingham Lake and Mountain Lake.

D.2. Road Jurisdiction

The jurisdiction of roads entails determining who is responsible for the construction and maintenance of roads. During the days of early statehood, the primary jurisdiction of roads was considered to be the responsibility of the town boards, counties played a secondary interest, and the state was responsible for few to no roads. From early statehood to the 1930's, the state took the responsibility for the 70 constitutional routes, in order to provide a network of uniformly constructed and maintained roads. During the Depression years (1930's) the prevailing sentiment shifted to placing jurisdictional responsibility at higher levels of government, where it was thought they could be better maintained. Currently, almost all roads under state jurisdiction were established 50 - 60 years ago. The 1921 new road law passed by the Minnesota Legislature created four systems of roads:

1. Trunk Highway System. Statewide, 70 routes were established under a 1920 Constitutional amendment (6,877 miles). In Cottonwood County, these state and US Highways include: 30, 60, 62, and 71.
2. County State Aid Highways (CSAH) are roads or streets that were established and designated under county jurisdiction in accordance with Minnesota Statutes Chapter 162. The state provides funding assistance to maintain the CSAH system.
3. County Roads (CR). These roads are established, constructed, and improved by the County Boards. They are under the sole authority of the County Board.
4. Township Road. A road under the authority of the town board, or reverted to township jurisdiction by the County Board. These roads are constructed and maintained by Town Boards

5. Municipal or City Street. - Any street under the jurisdiction of a municipality not otherwise designated as a Trunk Highway, County State Aid Street/Highway or County Highway.

Figure 4-2. Roadway Miles in Cottonwood County Per Road Jurisdiction

US & State Hwy System	CSAH System	County System	Township System	Municipal Streets	St Game Preserve	Total Miles
188.617	637.282	193.358	1398.304	131.684	1.36	2550.604

Source: MN/DOT

D.3. Weight Restrictions

During the spring of each year, the load carrying capacity of highways is reduced as a result of thawing and excess water in the subgrade. Spring axle load restrictions are determined by testing the road while simulated truckloads pass over the road sections. The spring load restrictions for axle load are set when 85% of the road section is able to handle the weight.

The Minnesota Department of Transportation (MN/DOT) has a policy to maintain the Trunk Highway network at a ten ton capacity. When road segments fall below this capacity, the District Office determines whether to allow ten ton loads, placing the section at higher risk of deterioration or to post the road at a lower level. Spring Weight Restrictions are applied to routes less than 10 tons year round and cause the greatest difficulty to commerce and industry where there is limited access.

Land use activities in the County that generate heavy traffic and are at times affected by the Spring Weight restrictions affect a variety of activities: grain elevators, animal confinement facilities, cement plants, feed supply companies, value-added agricultural processing facilities, contractors, farmers, and other businesses in the county. The majority of the value-added industries are located along the TH 60 / Union Pacific Railroad Corridor. Future impacts may be affected by increased size and / or weight of agricultural equipment and new development activity, such as wind turbine development.

D.4 Highway Improvements

Cottonwood County annually updates the County Five Year Road and Bridge Plan. This is a capital improvements plan that is reviewed and approved by the County Board. A copy is available from the County Engineer. The planning and development involved in the development of the County Road and Bridge Plan includes review of the entire County Road and Bridge network to assess changes that may have occurred during the year. The fiscally constrained list of projects is then revised based on the annual review of the system.

D.5 Bridges

The Minnesota Department of Transportation maintains an inventory of bridges in the state and record of an inspection report that identifies the condition of the bridges. There are 237 bridges, 10 feet or longer in the County. Figure 4-3 provides an inventory of the number and breakdown of bridges by road jurisdiction in 2003.

Bridge deficiency needs are identified by bridge sufficiency ratings. A sufficiency rating includes many factors, including actual structural condition of a bridge, detour length, traffic count, the approach, bridge length & width, and structural characteristics. The average age of all Minnesota bridges (10' and longer) is 31 years, in Cottonwood County the average age is 37 years; the average sufficiency rating for all bridges in the state is 88, in Cottonwood County the rating is 85. This indicates that the bridges in the County are on the average older and their sufficiency ratings are a little worse, but are still above a rating of 80. The 2003 inventory identified 15% of County bridges and 19% of township bridges (10' and longer) have a sufficiency rating at below 80.

Local roads play an essential role in the overall state transportation network and local bridges are the critical component of the local road systems. The State support for the replacement or rehabilitation of local bridges continues to be crucial to maintaining the integrity of the local road systems and is necessary for the County and the townships to proceed with the replacement or rehabilitation of the high priority deficient bridges. State Transportation Bond Funds are often the funding source to replace or rehabilitate bridges.

Figure 4-3. Bridge sufficiency rating (2003)	Age and condition of Bridges 10 feet & over.	Deficient Bridges, 10'+ Sufficiency rating <= 80	Age and condition of Bridges 20 feet & over.
TH	24	2	16
County	92	14	59
Twp	119	23	75
City	2	0	2
Total	237	39	152
Ave Age All Bridges	37, statewide 31		34, statewide 30
Ave Sufficiency Rating	85, statewide 88		86, statewide 87
Ave Age Local Bridges	37, statewide 31		34, statewide 30
Ave Sufficiency Rating	84, statewide 87		85, statewide 87

Source: MN/DOT

D.6. Railroads

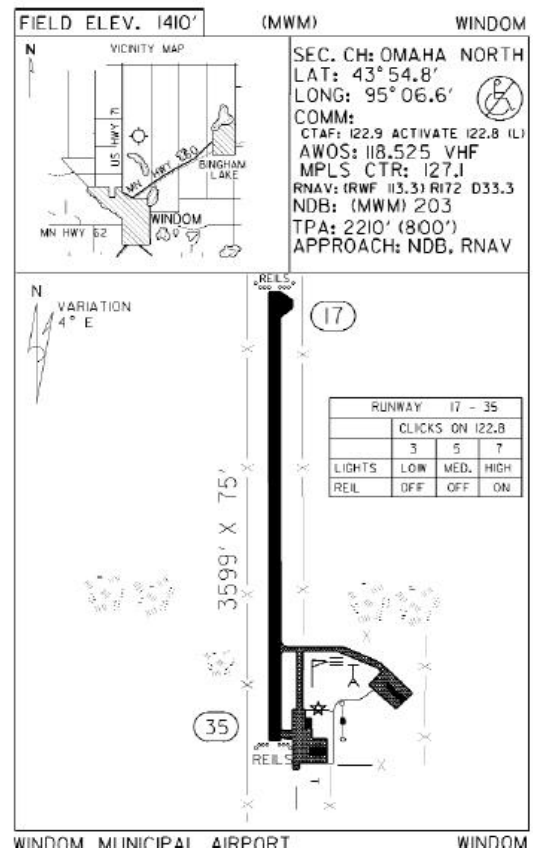
The Union Pacific Railroad (formerly the Chicago & Northwestern) runs parallel to Highway 60. This is a Class I Railroad that operates 4 trains per day through Cottonwood County at 49 miles per hour. The Track Classification is Class IV, which allows for up to 60 mph for freight movement and is a primary line.

Safety of rail crossings is an important issue in Cottonwood County, from the track speed as well as the railroad transecting at an angle over the gridiron layout of the roadways. There are 21 public crossings; 12 are marked with active warning devices.

Recently the rail industry has been experiencing a higher usage – in tandem with the rise in fuel prices. Planning issues to keep in sight include increased rail traffic (safety and increased exposure at crossings), potential businesses development and the need to access rail (via existing facility or new facility).

D.7. Aeronautics

The Windom Municipal Airport is located about three miles north of the developed part of the City of Windom on US Highway 71. The longest runway is 3,600 feet, and is paved and lighted. There is a beacon as a navigational aid and an automated weather observation station (AWOSA). There are currently two hangers and 13 aircraft based at the field, all single engines and no jet engine aircraft. There are 10 average daily



aircraft operations, 50% of which are transient general aviation, 20% local general aviation and 30% air taxi. In 2005, the City of Windom received federal funding to construct two new hangers, capable of holding eight planes each, and a new arrival/departure building.

D.8. Transit

The County has operated a Countywide Public Transit System since 1989. The countywide system operates from 8 a.m. to 4:30 p.m. Monday through Friday and utilizes 3 buses (2 primary and 1 backup). The system operating class is dial-a-ride. The County Family Service Agency coordinates many ride needs through volunteer driver trips, coordinated through RSVP.

During 2004, the Public Transit System picked up individuals in the Communities and the service is available to all residents in the County. The System currently has dial-a-ride demand 4 days per week in the morning and afternoon to Mountain Lake, and coordinates with medical appointments whenever possible. One day per week the dial-a-ride demand calls for a morning and afternoon run to the communities of Jeffers, Storden and Westbrook. One day per month, the transit system bus goes to Worthington.

In January 2005, the transit system began using tokens instead of tickets. Passengers will still be able to pay cash for their rides but will get a reduced fee as an incentive if they use tokens.

- ? **Intercity Bus Service** provides access to both the Twin Cities and Sioux Falls. The nearest passenger stops are located in Jackson (Jackson County) and Worthington (Nobles County). The Worthington stop has a ticket counter, and tickets can also be purchased through the Internet.

D.9. Emerging Issues

- ? **Access Management.** Roads serve a variety of purposes in a multi-modal transportation system. Roads may be designed to move the maximum amount of people and freight from one state to another in the least amount of time. Roads may only be needed to move people and their groceries to their individual driveways. There is always a tension between through-traffic and local access, especially on rural roads with fast trucks, slow farm machinery and plenty of wildlife to distract drivers.

Access management is the planning, design and implementation of land use and transportation strategies in an effort to maintain a safe flow of traffic, while accommodating access needs of adjacent development. MN/DOT's Access Management program provides a standard set of intersection and access guidelines scaled to different types of highways, to reduce conflicts between through and local traffic. In Cottonwood County, State Highway 60 is considered an Interregional Corridor, US 71 a Regional Corridor, and State Highways 30 and 62 Minor Arterial highways. Within each of these primary categories, highways are further broken down into sub-categories based on their urban, urbanizing, or rural character.

The Access Management guidelines kick in for a new access, when there is a change in use of an existing road access, or reconstruction of a highway. These guidelines recommend minimum distance between intersections of public roads and private access drives. For example, on the rural portions of US 71, there should be no new public roads closer together than the one-mile section grid, or possibly ½ mile with restrictions and special engineering. In some areas, a driveway for a single family dwelling may need only a few conditional improvements, where access for a gas station or warehouse could need a long list of conditions to prevent traffic conflicts.

MN/DOT also has a special process (Exception and Deviation) to accommodate immediate access needs while planning for alternative access in the future. Special plans can also be

conducted in areas that are congested or have unique concerns. In 2002, such a plan was conducted that addressed specific concerns in the urbanized area along Highway 60 in Windom.

It is important to consult state, county, and township officials at the beginning of a project, before too much time, effort and money is invested. Any new division of land should carefully plan for future access, not only for the site in question but also to avoid blocking future access for their neighbors. In the big picture, the key to successful access management is the well-planned

Figure 4-4: MN/DOT Access Management Guidelines in Cottonwood County
2004

Highway	Category	Intersection Spacing		Private Access
		Full Movement	Secondary	
MN Highway 60	Interregional Corridor			
Jackson Co line - Windom	Rural/Bypass	1 mile	*1/2 mile	Strongly Discouraged
Windom	Urban/Core	<i>See Access Management Plan for Windom</i>		
Windom - CSAH 2 (Bingham Lake)	Rural/Bypass	1 mile	*1/2 mile	Strongly Discouraged
Bingham Lake	Urban	1/2 mile	*1/4 mile	By Exception or Deviation
Bingham Lake - Watonwan Co line	Rural/Bypass	1 mile	*1/2 mile	Strongly Discouraged
US Highway 71	Regional Corridor			
Jackson Co line - Windom	Rural	1 mile	1/2 mile	Subject to Conditions
Windom	Urban	1/2 mile	1/4 mile	By Exception or Deviation
Windom - Redwood Co line	Rural	1 mile	1/2 mile	Subject to Conditions
MN Highway 30	Minor Arterial			
In & near cities of Westbrook, Storden & Jeffers	Urban	1/4 mile	1/8 mile	By Exception or Deviation
Rural portions	Rural	1/2 mile	1/4 mile	Subject to Conditions
MN Highway 62	Minor Arterial			
Murray Co line - Windom	Rural	1/2 mile	1/4 mile	Subject to Conditions
Windom	Urban	1/4 mile	1/8 mile	By Exception or Deviation

Source: MN/DOT Access Category System and Spacing Guidelines
Trunk Highway 60 Medium Priority Interregional Corridor Access
Management Plan, Windom, Minnesota (2002)

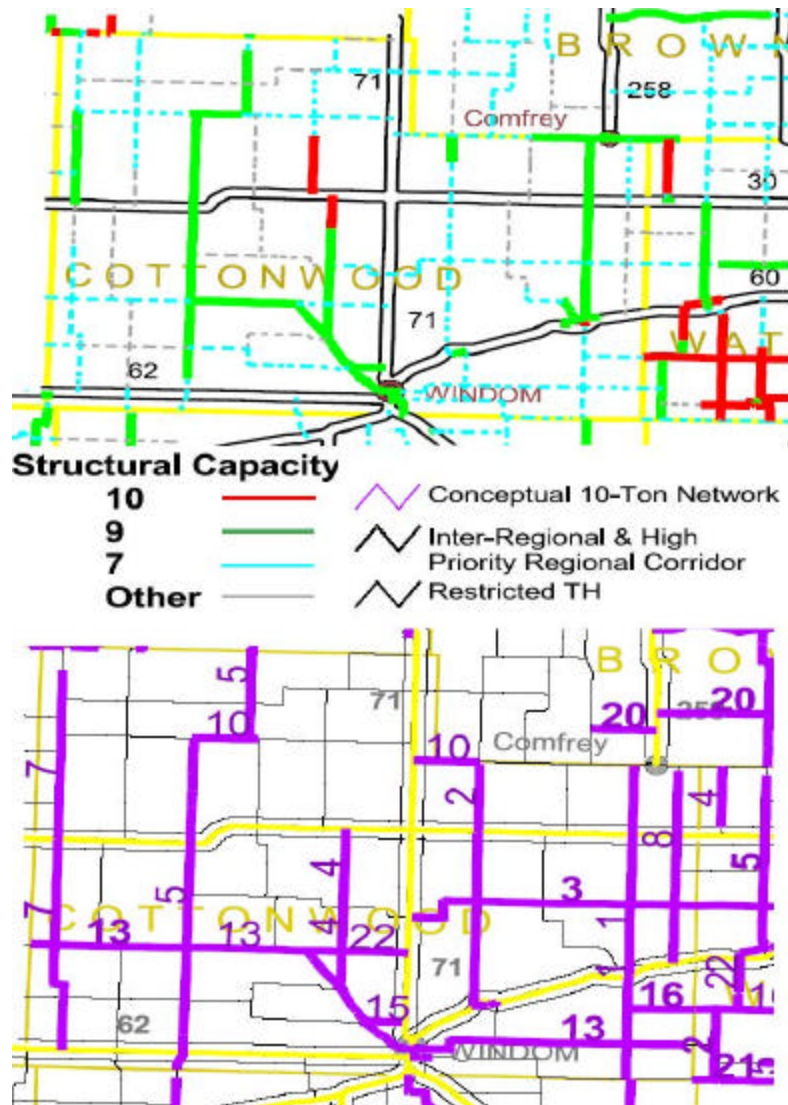
* may be limited

development of a network of connected streets and roads, so that people can access private property and public roads, and stay safe doing it.

- ? **Ten Ton Roads and Heavy-weight Traffic.** The State of Minnesota maintains a year round ten ton Trunk Highway road network. This network is built to facilitate the movement of freight. Often the location of business and industry is not located along one of these state routes and a lower capacity roadway is used. The integrality of the road is compromised when over weight traffic utilizes it. Cottonwood County has a large amount of agricultural activities which require access from the local road system to the state highway system. Other activities that also have a weight impact include sand and gravel mining; temporary traffic for construction and maintenance of facilities, including wind towers; feedlot operations; as well as other heavy weight traffic considerations.

A recent statewide initiative has been the identification of a system of local ten ton routes. These routes are identified in the structural capacity map. The County has constructed recent construction projects to ten ton capacity. However, to address ten ton needs of the county, the second diagram illustrates the conceptual 10-ton road network.

Many industries in the County generate heavy traffic, and over the years, the nature and weight of traffic has changed. In agriculture, semi-trucks are replacing grain wagons for the first haul (farm to market). Larger feedlot facilities are also increasing the size of agricultural equipment and increasing traffic. New traffic, such as construction and maintenance equipment for wind generation farms, will also affect the costs of road maintenance.



- ? **Rural Housing Development.** New non-farm rural housing has and will continue to impact maintenance of roads. Non-farm residents require access to communities for work and necessities, and road authorities have and will continue to feel increased pressure to increase maintenance of rural roads.

E. County Buildings and Facilities

There are many buildings and facilities owned by the County. The County Courthouse, Law Enforcement Facility (which includes a jail), County Office Building, County Highway Department facilities, and the County Family Service Facility are all located in Windom. The County Attorney is located in a building rented by the County. The County Courthouse is listed on the National Register of Historic Places.

The County owns Highway Shops located in Jeffers, Mountain Lake, Storden, and Westbrook besides the facility in Windom. The County Landfill is located in Section 31 of Dale Township. Cottonwood County owns park facilities throughout the County which are discussed in Chapter V. Cultural and Recreational Resources.

E.1. Landfill

The Cottonwood County Landfill (Permit SW-143) is located on Cottonwood County CSAH 22, approximately 8 miles northwest of Windom, MN via US Highway 71 or Cottonwood CSAH 13. The landfill is a 200-acre site with a permitted fill area of about 46 acres; remaining design capacity has an estimated life of approximately of 25 years (based on 2003 MSW received, 510,370 cubic yards of solid waste). Total capacity is 1,075,575 cubic yards of which 680,530 cubic yards are permitted (prior to the 2004 re-permitting). As of November 2003, the remaining capacity was 114,320 cubic yards. Cottonwood County continues to operate this site in compliance with Minnesota Pollution Control Agency (MPCA) regulations. An estimated 10 acres was developed on-site for future expansion by extending the liner system over the old fill area. The Certificate of Need capacity for the Cottonwood County Landfill is 207,221 cubic yards for the 10-year planning period 2003 through 2013, which includes Murray County MSW.

2001	9,516.89 Tons
2002	8,459.17 Tons
2003	7,479.11 Tons
2004	6,500 Tons (loss of Murray County waste projected)

The MPCA will combine the MSW landfill permit number SW143 with the Demolition Permit number SW459 into one permit beginning with the issuance of the new permit pending.

A history of design, permitting and the Certificate of Need (CON) is on file at the Cottonwood County Solid Waste Office and is also contained in the Cottonwood County Solid Waste Management Plan. The landfill safety record has been free of any major problems during its period of operation. Some gas migration has been noted since the closure of the old fill area and was addressed by adding gas wells when cell #4 was constructed. With the vertical expansion over cell # 4, the horizontal vents will be moved to allow for the expansion. Vertical gas vents have been added to all new cells.

? **Potential Environmental Health Impacts.** On-site soils at the landfill consist primarily of sand and gravel overlaying a clay layer about 20 to 30 feet below the surface. A hydro-geologic study of the site has been completed to assess the landfill's impact on area groundwater, and included the installation of new monitoring wells and testing of private wells. Cottonwood County has identified minor groundwater contamination at the site from vinyl chloride and arsenic. The problem was evaluated through a risk assessment. To date no remedial action, other than additional well installation and testing, has been required. No indication of a problem severe enough to require the closure of the site exists.

MPCA inspection reports, over the past few years, have noted minor problems with blowing paper and inadequate covering of waste. Gas migration has been noted since the closure of the 14 acres of the old fill area, and was addressed in the permitting documents. Re-permitting was last completed in 2004. The landfill safety record has been free of any major problems noted in its history. The future viability of the landfill is suspect. The issue of flow waste surety has not been addressed. The loss of Murray County waste and the present tipping fees has placed the operation of the landfill at a marginal level, and additional loss of waste may require additional revenue either through additional subsidy or increase tip fee.

F. Educational Facilities

There are eight different public school districts with jurisdictions within Cottonwood County. Open Enrollment is also an option for students in the State of Minnesota. Mountain Lake and Westbrook both

have a Christian School; the Hutterian Brethren Colonies south of Mountain Lake have their own schools, and there are a number of families within the county that are home schooling their children.

F.1 Public Schools

Public Schools include Butterfield-Odin, Comfrey, Heron Lake-Okabena, Mountain Lake, Red Rock Central, Westbrook-Walnut Grove (with facilities in both towns), and Windom. Red Rock Central is a consolidated school district consisting of Jeffers, Storden, Lamberton and Sanborn with grades K – 5 in Jeffers and 6 – 12 in Lamberton. Four of these districts—Mountain Lake, Red Rock Central, Westbrook-Walnut Grove, and Windom—have facilities operating within the County.

Figure 4-6. School Enrollment Numbers P-K to 12 Fall Enrollment Ethnicity by District						
	2003-2004		2002 – 2003		2001 – 2002	
	Total	Total Minority	Total	Total Minority	Total	Total Minority
Mountain Lake	526	153	512	144	501	122
Red Rock Central	524	14	533	14	547	11
Westbrook-Walnut Grove	524	117	509	91	507	71
Windom	1040	88	1047	58	1085	56

The enrollment trend over the past three years for the 4 public schools located in the County has decrease by 1% (26 students). A larger impact is a growing minority population. In the 2001-2002 school year, enrollment figures identified 260 minority students (9.8% of the total enrollment). In the 2004 to 2004 school year, the enrollment had grown to 14.2% or 372 students.

F.2 Public Libraries

The Plum Creek Library System is a regional library system covering nine counties in southwest Minnesota, including Cottonwood. The cities of Westbrook, Mountain Lake, and Windom all have public libraries, and a bookmobile provides access to the library system about once per month in the communities of Delft, Jeffers, and Storden. Patrons can access the Plum Creek Library System catalog though the internet.

G. Public Health and Safety

One of the primary services provided by government under the Constitution is the protection of public health, safety and welfare. Cottonwood County is fortunate to have service providers in the private, non-profit and public sectors.

G.1 Medical Facilities

Access to state of the art technology and equipment as well as professional staff are essential ingredients of good health care. Currently, timely access to major medical facilities is conducted by helicopter transport or ambulance. Specialty medical services now come to the local medical facilities on a regular basis. Technology advancements on the horizon may include telemedicine, which has the potential to reduce the access time required for major medical service.

Public and private medical facilities, pharmacies, nursing homes and assisted living facilities located in Cottonwood County include:

- ? Schmidt Memorial Hospital in Westbrook
- ? Windom Area Hospital in Windom
- ? Medical doctor offices in Mountain Lake, Westbrook, and Windom
- ? Dental offices in Mountain Lake, Westbrook, and Windom

- ? Nursing home facilities in Mountain Lake, Westbrook, and Windom
- ? Assisted living facilities in Mountain Lake, Westbrook, and Windom
- ? Medical supply / pharmacies in Mountain Lake, Westbrook, and Windom

G.2 911 Emergency System

In an emergency, dialing 911 is usually the most effective way to summon help. That’s because 911 is more than just an easy to remember number. When you dial 911, the system is designed to automatically connect your call to the right public safety agency serving your location, and provide the 911 call taker with a display of your telephone number and your address location. Help can be dispatched to your location even if you cannot speak. Minnesota State Statute 403.03 identifies the 911 services that shall be provided as: police, firefighting, and emergency medical and ambulance services. Other emergency and civil defense services may be incorporated into the 911 system at the discretion of the public agency operating the public safety answering point.

"911 service" means a telecommunications service that automatically connects a person dialing the digits 911 to an established public safety answering point. 911 service includes: 1) equipment for connecting and outswitching 911 calls within a telephone central office, trunking facilities from the central office to a public safety answering point; 2) equipment, as appropriate, for automatically selectively routing 911 calls in situations where one telephone central office serves more than one public safety answering point; and 3) provision of automatic location identification if the public safety answering point has the capability of providing that service.

- ? **Enhanced 911 service** means the use of selective routing, automatic location identification, or local location identification as part of local 911 service. The State of Minnesota 911 website identified Cottonwood County at a Phase II Enhanced wireless 911 status. This means that Wireless Phase II coverage is available to cell phone users in areas where wireless carriers and local 911 centers have added technologies to locate wireless callers in emergencies

Figure 4-7. Cottonwood County 9-1-1 PUBLIC SAFETY ANSWERING POINTS				
Telephone Numbers	Agency Address	9-1-1 System	Area Served	Other Contacts
24 HOUR 507-831-1375 VOICE: 507-831-1375 FAX: 507-831-1957	Cottonwood Co Sheriff’s Office 902 Fifth Avenue Windom, MN 56101	IES Ruthton Selective Router, ALI	Cottonwood Co Phase II LAT LON	Marshall State Patrol 507-537-6277

Source: Minnesota 911 System website

G.3 Ambulance and Fire Protection.

Volunteer fire departments have a long tradition of service in our rural communities. Departments in Westbrook, Storden, Jeffers, Windom and Mountain Lake serve the city and areas in the county. Comfrey, Fulda, Darfur, Lamberton and Walnut Grove also serve parts of Cottonwood County.

Volunteers also provide EMT and ambulance service in the county.

G.4 Law Enforcement.

Cottonwood County Law Enforcement Office is located at 902 Fifth Avenue, Windom, Minnesota and are responsible for the whole county. The staff of 21 includes the Sheriff, Deputies, Dispatchers, Jailers, Secretaries, and Custodians. They receive the 911 calls and dispatch the emergency equipment. Deputy vehicles are equipped with GPS units and radios which allow contact with other

area Law Enforcement agencies. The present tower located beside the Windom office will soon be replaced with a stronger tower and will allow sharing space with other entities.

Cottonwood County has a jail with 21 beds and house male and female inmates. 10 beds are for inmates with work release privileges and 11 are for those who must serve a sentence with no work release. Cottonwood County will house prisoners from other counties as room allows.

The municipalities of Mountain Lake, Windom and Westbrook have their own city police.

G.5 Hazard Mitigation

Hazard mitigation planning allows a community to plan for a disaster before it occurs, as was noted in Chapter V. Cultural and Recreational Resources as is related to floods. The federal Disaster Mitigation Act of 2000 established a national program for pre-disaster mitigation, to break the cycle of disaster-repair-disaster in too many places. The Southwest Regional Development Commission has assisted several counties in the region to complete this public planning process, which can include the county, cities and townships in one multi-jurisdictional document. As of November of 2004, communities must have mitigation plans in place to be eligible for certain hazard mitigation funding. The Cottonwood County's Sheriff's Office is responsible for Emergency Management.

H. Public Utilities.

H.1. Energy Utilities.

Electric Utility providers in Cottonwood County include South Central Electric, Federated Rural Electric, Alliant Energy, Windom Municipal Utilities, Mountain Lake Municipal Utilities, and Westbrook Municipal Utilities. Electric utility providers are regulated by the Minnesota Public Utilities Commission (PUC), which has discussed retail competition but has not moved forward on the issue.

Increased use of renewable energy is being seen in rural Minnesota. Cottonwood County has areas that are a good wind regime and development can be anticipated to occur. However, access to transmission lines has been an issue in the region and may impede further development.

H.2 Telecommunications

Utilities provide essential services to the public, and can be investor-owned or operated by public organizations. Modern telecommunications utilities provide the electronic transmission of information, including digital data, voice, fax, sound and video, from one location to another over some form of communications link. Up to date telecommunications is one way for rural areas of the country to be competitive in the state, nation, and world.

The Federal Communications Commission (FCC) regulates the provision of interstate and interLATA long-distance service. Local long distance service and local telephone service are regulated by the Minnesota Public Utilities Commission (PUC). Companies and cooperatives which provided monopoly service prior to the Federal Telecommunications Act of 1996 are known as "incumbent local exchange carriers" (ILECs). Minnesota now also permits "competitive local exchange carriers" (CLECs) so that consumers can have a choice for telecommunications service. The City of Windom has recently begun offering local telecommunications services in addition to cable TV through a 100 MBs data fiber-to-home architecture, and will be considering additional services in the future.

Figure 4-8. Firms Providing Telecommunications Services

	CenturyTel of Minnesota	Citizens Telecom. Co of Minn (Frontier)	Digital Telecommunications Inc	Eschelon Telecom of MN Inc	Excel Telecom. Inc	Integra Telecom of MN, Inc	Ionex Communications North, Inc	MediaComm	NOS Communications, Inc	Qwest Corporation	Redwood County Telephone Co	Sprint Communications Company	USLink, Inc	Western Telephone Co.	City of Windom	Z-Tel Communications, Inc
Amboy Twp	x	x														
Amo Twp	x		x	x	x	x	x		x	x		x	x			x
Ann Twp	x										x					
Bingham Lake City			x	x	x	x	x			x		x	x			x
Carson Twp		x	x	x	x	x	x		x	x		x	x			x
Comfrey City		x														
Dale Twp	x	x	x	x	x	x	x		x	x		x	x			x
Delton Twp	x	x												x		
Germantown Twp	x													x		
Great Bend Twp		x	x	x	x	x	x		x	x		x	x			x
Highwater Twp	x															
Jeffers City	x															
Lakeside Twp		x	x	x	x	x	x		x	x		x	x			x
Midway Twp		x														
Mountain Lake City		x						x								
Mountain Lake Twp		x	x	x	x	x	x		x	x		x	x			x
Rose Hill Twp	x															
Selma Twp		x														
Southbrook Twp	x															
Springfield Twp	x		x	x	x	x	x		x	x		x	x			x
Storden City	x															
Storden Twp	x															
Westbrook City	x															
Westbrook Twp	x															
Windom City			x	x	x	x	x		x	x		x	x		x	x

Source: Minnesota Department of Commerce, Cottonwood County Zoning Office

As new development occurs in the County, the initial cost of telecommunication service may rise in areas not currently served. To reduce costs of initial service, infrastructure development costs may need to be shared among all lot owners.