

CHAPTER FIVE:

Current and Emerging Issues

A crucial element in the planning process of the Comprehensive Plan is identifying the current and emerging issues faced by Cass County. The main goal of the Plan is providing the citizens of Cass County a vision of the future growth and development. Accomplishing this requires identification of the issues faced by the county, both at present and those forecasted into the near future. Establishing these issues allows the county to outline the goals, objectives, and policies; providing the specific information for the planning decisions shaping the county's future growth and development.

The Land and Natural Resources

- The soils in Cass County do not allow for indiscriminate development. Wetness, shrink-swell, high seasonal water tables, high or low permeability, frost action, and low soil strength are characteristics of many of the soils.
 - The areas adjacent to rivers are often viewed as desirable for development, but are already naturally prone to slide and bank failures.
 - These characteristics are compounded by the addition of structures, fill, septic systems, watered lawns, and removal of certain vegetation.
- The natural vegetation along rivers and their deep roots help to anchor the river banks.
 - The removal of the natural vegetation compounds the bank stability problems in the county.
 - “Manicured” lawns along the river banks have both short roots and require large amounts of water; both increasing bank stability issues.
- Ground water from aquifers is limited in most areas of the county. For the most part, the aquifers capable of providing water are already being used and can only provide limited amounts of water to new users. The aquifers in the metro area

- currently do not have the capacity for many new users and contain a finite amount of water.
- The majority of water for the metro area is provided by the Red and Sheyenne rivers.
 - According to the Bureau of Reclamations Red River Valley Water Needs Assessment, if no action is taken population and industrial growth would result in water supply shortages in the Red River Valley.
 - The Bureau of Reclamation also found that the Red and Sheyenne water users will face shortage without future water augmentation, changes in water management, or changes in water use amount and patterns.
 - The water quality of the county's rivers is lower than it potentially could be due to high amounts of sedimentation and pollution from municipal runoff, agriculture runoff, industrial use, and inadequate solid waste disposal.
 - According to the National Wetlands Inventory, only 13,500 acres of land are capable of sustaining wetlands (permanent and semi-permanent or seasonal flooding) in the county.
 - The Red River's large flood plain, lack of gradient, spring thaw all make the valley prone to spring flooding.
 - The addition of fill and structures both reduces the natural storage area for flooding and impede water flow, both potentially leading to increase flooding.
 - Allowing construction in flood prone areas places residences and property at risk during times of flooding.
 - The high productivity of the soils in Cass County has made farming the primary land use outside of the metro area.
 - The productivity of the land is currently not taken into account with proposed development.
 - The number of farms and farmland in the county are decreasing while the average size is increasing (U.S. Department of Agriculture 1997).

	1987	1992	1997	1992-1997 Difference	Percent Difference
Total Farms	1,183	1,004	919	-85	-9.25%
Farmland (acres)	1,058,821	1,070,528	1,067,667	-2,861	-0.27%
Average Size (acres)	895	1,066	1,162	+96	+8.26%

Table 5.1. Cass County's inverse relationship between number and size of farms (U.S. Department of Agriculture 1997).

Population

- Cass County's 2000 Census population was 123,138 and the 2003 estimated population was 127,137 residents.
- Population grew by 19.7% between 1990 and 2000 (US Census Bureau 2004).
- Cass County had a net migration increase of 2,246 between 1995 and 2000, compared to a net loss of 25,207 for North Dakota (US Census Bureau 2004).
- Growth is continuing to occur more rapidly in the eastern half of the county.
- Cass County's population is continually becoming more urbanized.

	1990	2000	1990 Percent	2000 Percent
Total	102,874	123,138	100.0%	100.0%
Urban	86,413	106,577	84.0%	86.6%
Rural	16,461	16,561	16.0%	13.4%

Table 5.2. The trends in urban versus rural living in Cass County (US Census Bureau 2004).

- Based on population projections, Cass County's population is expected to increase by 80,000 residents by 2030.

Land Use

- Agricultural (including vacant land) has and continues to be the predominate land use in the county, despite losses in farmland.
 - Prices of agricultural lands surrounding the metro area are greatly influenced by encroaching development.
 - The increased value often makes development more profitable than continuing to farm the land.
 - Agricultural practices can be negatively impacted by premature residential development.
- Rural non-farm is the county's second largest land use.
 - Cass County is the only county in the state to have increased number of rural residents.
 - Cheaper land, lower density development, "rural atmosphere," lower taxes, and less development restrictions have all been factors for this land use's increase.
 - Premature rural non-farm development can lead to land use conflicts with the surrounding agricultural lands.
- The metropolitan area (Fargo and West Fargo) accounts for 85% of the county's population, but only 2% of the land.
 - Fargo and West Fargo respectively annex on average 550 and 400 acres a year.
 - Their annexation often includes previously rural subdivisions; the large lots and rural services often make for a difficult transition into an urban environment.
- Small cities, the final land use, consist of the remaining incorporated cities. Those cities in close proximity to the metro area have experienced growth.

Infrastructure

- Establishing corridor preservation for arterial and collector streets in the surrounding metropolitan area will allow for a properly planned road network serving future developments.
- Premature or leap frog development and their remote proximity from urban areas creates burdens to provide services:
 - Outlying rural subdivisions place added pressures on county's road network. Their increased traffic creates the need for higher capacity roads, turn lanes, signals, etc.; however there lacks a source of funding to provide these needed services.
 - The current county highway budget places greater emphasis on maintaining the current investment in roads, limiting the county's ability to create new hard surface roads or expand existing roads.
 - The increased tax base from these rural subdivisions often does not pay for the added maintenance costs or upgrades to county and township roads.
 - Police, fire, emergency services are required to cover a larger areas and greater distances as result of premature developments.
 - School districts face greater costs in providing busing service to a larger area.
- Subdivision ordinances do not currently require infrastructure improvement plan and documentation of their completion.
 - Water, sewer, electricity, gas lines, phone, cable agreements entered into by the developer demonstrating the installation and completion of these services to the subdivision are currently not required.
- Residents are increasingly driving alone to work and using less car pools and public transportation (US Census Bureau 2004).
 - The growing population and decline in carpooling and transit-use will likely place added pressures on the county's highway system.
 - The average travel time to work in Cass County is 15.7 minutes (Census 2000).

	1990 Total	1990 Percentage	2000 Total	2000 Percentage	Total Difference	Percent Difference
Workers 16 and Older	54,438	100.0	69,743	100.0	15,305	
Drive Alone	42,548	78.2	58,202	83.5	15,654	5.3
In carpools	5,786	10.6	5,584	8.0	-202	-2.6
Using public transportation	576	1.0	256	0.4	-320	-0.6
Using other means	531	1.0	673	1.0	142	0.0
Walked	n/a	n/a	2,663	3.8	n/a	n/a
Worked at home	n/a	n/a	2,365	3.4	n/a	n/a

Table 5.3. Cass County's trends in commuting to work (US Census Bureau 2004)

Subdivisions and Developments

- Cass County's subdivision ordinances are more lenient than the requirements of Fargo and West Fargo. The laxer requirements can make development in the county more appealing and can indirectly promote premature developments away from the urban fringe.
- The rural subdivisions are often marketed and built for residents moving from the metro area. Many of the residents moving into the rural subdivisions maintain attitudes about their new neighborhood based on previous experiences established while living in an urban area.
 - Most rural subdivisions are built with limited services; gravel roads, open ditches, private wells, and on-site septic systems.
 - The dust and mud from the gravel roads, the standing water in the ditches, the quantity and quality of water from wells, and the operation of on-site septic systems can all be subject to conflict and frustration for residents custom to urban services.
 - Many residents are often unaware the roads within the subdivision are private and the maintenance is the responsibility of a home owners association.
 - The townships do not have the resources available for maintenance or creation of subdivision roads equaling those found within municipalities.

- Retrofitting these subdivisions for urban services increases costs and disruption for the residents.
- The large “urban” type rural subdivisions often use “rural” type services, such as private wells and on-site septic systems.
 - On site septic and private wells can work in the short term, but their long term use in large developments often can create problems or dissatisfaction for the residents.
 - The concentration of on-site septic systems and private wells in large developments can decrease the operational lifespan of these services.
 - Often the use of private wells circumvents the requirement for a water management plan administered by the State Water Commission or other entity.
- Rural subdivisions are often built with large lots (5-10 acres), these large lot sizes do not lend themselves to easy adaptation to an urban environment when annexed.
 - The layout to these developments often do not allow for easy resubdivision of the large lots.
 - This type of development does not easily allow for logical location and openings for upgrade and expansion of the road network needed in an urban environment.
 - The large lots sizes increase the specials to property owners when urban services are added for these developments, often requiring homeowners to sell or subdivide their property.
- Leap frog or premature developments have the ability to increase pressures on the surrounding agriculture land uses:
 - Leap frog developments are often completely surrounded by agriculture lands, creating land use conflicts between residential developments and the existing agriculturally lands.
 - Land use conflicts faced by farmers:
 - Nuisance complaints from residential developments.
 - Increased traffic making transportation of equipment and product more challenging.

- Trespassing on land.
- Vandalism and theft of equipment and property.
- Crop damage from residents, horses, bikes, or motorized vehicles.
- The need to modify chemical application near subdivisions.
- Gathering of litter and trash deposited or blown from subdivisions.
- Washing away of seeds, drowning of crops, damage to drain tiles or ditches due to storm water run off from houses, roofs, driveways, and patios.

Land use conflicts faced by residential developments:

- Large and loud equipment
 - Chemical spraying
 - Dust
 - Long hours of farm operations during the harvest and planting
 - Odors
 - Increased truck traffic
- Current subdivision regulations only briefly discuss drainage plans and lack specific requirements and regulations. The current plans do not specifically address the impacts on surrounding agricultural lands and drainage system and currently do not provide assurance that the development will not negatively affect the surround lands crops, drain tile, ditches, drains, and swales.
 - Infrastructure improvements lack specific requirements, regulations, and installation.
 - Current regulations lack specific requirements and regulations for electricity, water, sewer, telephone, cable, etc. improvements, specifications, and installation.
 - The current regulations lack submittal of contracts with these service providers and or installers.
 - Rural subdivision can affect the quality, mobility, and safety of the surrounding public roads.
 - Improvements are often needed at the intersections of new subdivisions and public roads. The costs of these improvements are currently the

responsibility of the county and not those most benefiting from the service.

- Large subdivisions often require turn lanes, traffic signals, or other safety features at intersections to allow for safe and easy entrance and exit from the subdivision.
- These improvements are a necessity created by the subdivision and benefit the residents in the subdivisions the most.
- Rural subdivisions can strain the existing public road system, necessitating the need for conversion of gravel to hard surface, additional lanes, and more frequent maintenance.
 - These improvements are often the direct result of new subdivisions, yet currently these upgrades are not directly assessed to those most benefiting from the improvements.
 - The increase to the tax base and resulting taxes collected by these developments often only contribute a fraction of costs needed for these improvements.
 - Leap frog or premature developments create an increased strain on the public road network, creating larger funding and maintenance requirements to meet the higher traffic demands placed on the roads.
- Areas of the Red River Valley are prone to spring flooding, these same areas are often viewed as prime developable areas because of their location to river views and mature trees.
 - The addition of fill to build up low lying areas allow for development in flood plains, but the built up land reduces the natural and temporary water storage area for flood waters and disrupts the flow of the water, as well as places residents in serious dangers during times of high flood waters.
 - The current subdivision ordinances lack the specific requirements, regulations, and implementation of the flood protection plan.
- Current regulations allow for 10 acres of agricultural land to be subdivided without platting and review by the planning commission, this exception has been abused and used as a loophole for subdividing lots for residential development.

- Regulations currently not required for new subdivisions:
 - Establishment of bike paths allowing for connection to existing, current, and future bike paths.
 - Construction of pedestrian paths/sidewalks.
 - Lighting within or at the entrance of subdivisions.
 - Survey monuments or markers identifying streets and property lines.
 - Floodplain regulations and flood protection plans.
 - Drainage plan requirements, regulations, and specifications.
 - Landscaping
 - Buffer planting to reduce land use conflicts
 - Street trees.
 - Specifications for developments proposed in close proximity to rivers.
 - Specifications for vegetation protection along rivers.
 - Specific guidelines for parks and open space.
 - Historic or cultural surveys.
 - Requirements, regulations, and specifications for improvements to the public roads as result of the development and analysis of the proposed subdivision on the existing road network and future road network.
 - Guidelines to location and preservation of transportation corridors.
 - Lot configuration and requirements.
 - Residential
 - Nonresidential
 - Requirements of non-residential developments:
 - Parking requirements and design standards
 - Street design and standards
 - Detailed easement information
 - Location and restrictions of easements.
 - Pedestrian, utility, storm water, conservation, petroleum.
 - Wetlands
 - Proximity and location to wetlands and necessary regulations.

Housing

- Cass County has 51,315 households in 2000, an increase of 26.8% from the 1990 census (Census 2000).
- In 1990, 3,315 (8.2%) of occupied housing units used septic tanks or cesspools (Census 1990).
 - The use of on-site septic systems dictates the use of large lots, a characteristic not ideal for compact growth or future conversion to central sewer systems and urban environments.
- Cass County's housing units are continuing to be located within urban areas, but the county is still experiencing an increase in the number of rural residents.

	1990	2000	1990 Percent	2000 Percent
Total	42,407	53,790	100.0%	100.0%
Urban	36,291	47,467	85.6%	88.2%
Rural	6,116	6,323	14.4%	11.8%
Rural-Farm	n/a	566	n/a	1.1%
Rural-Non farm	n/a	5,757	n/a	10.7%

Table 5.4. The trends in urban and rural housing units in Cass County (US Census Bureau 2004).

Economy

- Cass County’s unemployment rates (USDA ERS):
 - 1997 – 1.3%
 - 1998 – 1.6%
 - 1999 – 1.8%
 - 2000 – 1.6%
 - 2001 – 1.6%
 - 2002 – 2.4%
- The Fargo/Moorhead community received a third-place ranking by Inc. Magazine for the 50 best small metropolitan cities in America for starting and growing a business.
- Cass County had a -29.6% drop in the number of workers in the agriculture industry between 1990 and 2000, but had an overall growth in all industries of 12,924 workers (22.5%), compared to an 8.1% growth by the state.

	1990 Cass	2000 Cass	1990 ND	2000 ND
Workers 16 and older in labor force	57,561	70,485	313,534	338,982
Agriculture, forestry, and fisheries	1,844	1,298	33,691	25,914
Percent of total	3.2%	1.8%	10.7	7.6

Table 5.5. Number of workers in the agriculture sector in Cass County (US Census Bureau 2004)