

### **III.**

## **Land Use Patterns and Development Trends**

### ***Physical Setting***

The Chippewa-Eau Claire Metropolitan Planning Area is located in adjoining portions of Chippewa and Eau Claire Counties, and includes the urban area Cities of Eau Claire, Chippewa Falls and Altoona, the Village of Lake Hallie, and portions of the Towns of Anson, Brunswick, Eagle Point, Hallie, Lafayette, Pleasant Valley, Seymour, Tilden, Union, Washington and Wheaton. The urban area is situated in the Chippewa River Valley of west central Wisconsin and is bisected by the Chippewa River flowing from northeast to southwest, as well as the Eau Claire River which flows from the east and intersects the Chippewa River in downtown Eau Claire. In addition, Lakes Wissota, Altoona, Half Moon, Hallie and Dells Pond, formed by impoundments and historical channel changes of the Chippewa and Eau Claire Rivers, add further diversification to the area's rolling topography. The unique topographical characteristics of this physical setting have shaped the development patterns of the urban area and have served both as amenities to the quality of life of area residents, as well as obstacles for the transportation system.

### ***Current and Projected Land Use***

A generalized land use mapping of the MPA was conducted with the cooperation and assistance of the municipalities in the planning area. The land use mapping incorporated available land use data from current municipal plans, updated the information where necessary, and conducted field inventories in the rural areas where current information was not readily available. The resulting generalized land use coverage for the MPA is depicted on Map 12. The mapping process was automated through the application of the computerized Geographic Information System (GIS) which allows the integration of data bases with mapping procedures to provide various overlay coverages for information analysis and presentation purposes. The GIS also allows land use acreage to be calculated for the various classified land use categories. Table 9 presents the approximate land use acreage by developed land use classification for the Chippewa-Eau Claire MPA for 2000.

**Table 9**  
**Chippewa-Eau Claire Metropolitan Planning Area**  
**Land Use Acreage by Developed Land Use Classification**  
**2000**

<b>Land Use Categories</b>	<b>Acreage</b>	<b>Percent of Developed Area</b>	<b>Percent of Total MPA</b>
Residential (1 & 2 family)	20,184	42%	18%
Residential (multi-family)	914	2%	1%
Commercial	2,675	5%	2%
Industrial	3,815	8%	3%
Government/Institutional	4,196	9%	4%
Recreational	4,783	10%	4%
Transportation (roads and rail)	11,380	24%	10%
<b>TOTAL DEVELOPED ACRES</b>	<b>47,947</b>	<b>100%</b>	<b>42%</b>
<b>TOTAL UNDEVELOPED ACRES</b>	<b>48,218</b>		<b>42%</b>
<b>WATER &amp; ENVIRONMENTAL AREAS</b>	<b>17,554</b>		<b>16%</b>
<b>TOTAL MPA ACRES</b>	<b>113,719</b>		<b>100%</b>

Source: West Central Wisconsin Regional Planning Commission

The development of a future land use map for the MPA incorporated information from future land use plans prepared by local municipalities. Meetings with local planners were conducted to ascertain the validity of the direction of their future land use plans and to make adjustments accordingly. Land use changes that were incorporated into the future land use map prepared for the MPA reflect recent growth trends. These changes also reflect a slight shift from residential to industrial and commercial land uses in selected growth areas. The relatively stable urban area economy continues to promote development activity, precipitated to a large extent by significant transportation infrastructure improvements (i.e., STH 29, USH 53 Bypass, Seymour Cray Sr. Blvd.) and municipal utility extensions and upgrades to serve new industrial, commercial and residential development.

Urban area development plans and transportation infrastructure improvements combine to shape development patterns. Future land use plans for urban area municipalities have also been strongly influenced by future plans for several major transportation improvements, including the scheduled 2005 completion of the STH 29 Bypass of Chippewa Falls, the scheduled 2006 completion of the USH 53 Bypass of Eau Claire, the expansion of STH 93 to four lanes extending south of Eau Claire, and the extension of the Seymour Cray Sr. Boulevard. The anticipated impact of these transportation projects on growth and development patterns is reflected in the land use planning efforts of both large and small municipalities. Special planning efforts have been initiated by urban area municipalities to support the development of future land uses that are of primary interest to them. The results of these local planning initiatives are also incorporated into the future land use map for the MPA. Map 13 depicts the projected future land use for the year 2030.

Table 10 presents the estimated future land use acreage by developed land use classification for the year 2030 and provides a comparison with the 2000 land use information. It is important to note that the future land use data compiled from available municipal land use plans represents land identified for particular types of development and does not necessarily mean that all such identified land will reach full development during the planning time period.

Land Use Categories	2000	2030	Change	
	Acreage	Acreage	Acreage	Percent
Residential (1 & 2 family)	20,184	31,457	+11,273	+56%
Residential (multi-family)	914	1,274	+360	+39%
Commercial	2,675	3,699	+1,024	+38%
Industrial	3,815	4,723	+908	+24%
Government/Institutional	4,196	4,234	+38	+1%
Recreational	4,783	5,123	+340	+7%
Transportation (roads and rail)	11,380	11,506	+126	+1%
<b>TOTAL DEVELOPED ACRES</b>	<b>47,947</b>	<b>62,016</b>	<b>+14,069</b>	<b>+29%</b>
<b>TOTAL UNDEVELOPED ACRES</b>	<b>48,218</b>	<b>34,149</b>	<b>-14,069</b>	<b>-29%</b>
<b>WATER &amp; ENVIRONMENTAL AREAS</b>	<b>17,554</b>	<b>17,554</b>		
<b>TOTAL MPA ACRES</b>	<b>113,719</b>	<b>113,719</b>		

Source: West Central Wisconsin Regional Planning Commission

For example, based on the 2000 estimates of dwelling units and residential land use, the residential density of the MPA is approximately 2.1 dwelling units per acre, which is extremely low for an urban development pattern. The 2030 projections for residential land use and dwelling units would further reduce the residential density to 1.7 dwelling units per acre. However, by applying a higher density urban residential development standard of 3.4 dwelling units per acre, the projected increase of 11,633 residential acres by 2030 could result in an increase of 39,552 dwelling units. This housing growth could accommodate an additional 98,880 persons, at 2.5 persons per household. This represents an average annual growth rate of approximately 3.5%, or more than three times the projected growth rate for the MPA, and would almost double the current population by the year 2030. However, the population and housing projections incorporated in this report are expected to reach only one-third of the residential capacity identified by future land use plans. It is not uncommon for land use plans to provide for additional capacity based on land suitability characteristics and to accommodate various development interests. Full development of the projected residential land use indicated on the future land use maps is not expected to occur during this long range planning time period and was not considered a viable option on which to base population and housing projections for this plan. A more realistic expectation to increase the future urban residential density to 3.4 dwelling units

per acre would require approximately 3,700 residential acres to accommodate the additional 12,422 dwelling units projected for the year 2030.

As depicted on the future land use map and supported through the land use acreage tabulations, the largest increases in development are expected in the residential, industrial and commercial land use categories. The areas projected to receive much of this new development are generally identified on the future land use map, but can be more specifically located through a comparison of Maps 4 and 6 which depict the projected high growth areas for population and employment by TAZ.

### ***Environmentally Sensitive Areas***

Current and future urban area development patterns are largely influenced by the availability of land and municipal utilities. The current *Chippewa Falls-Eau Claire Urban Sewer Service Plan for 2010* provided guidance in determining the reasonable extent of the metropolitan planning area boundary for 2030. The sewer service plan is currently being updated to the year 2025 and will be evaluated for any potential revisions to the 2030 planning area boundary when the update is completed. The extension of sewer and water utilities, along with the improved access afforded by transportation infrastructure improvements, are key elements in directing future urban development.

One of the focuses of the *Urban Sewer Service Plan* is to look at urban growth in relation to sewer capacity and the ability of municipal sewage treatment facilities to accommodate that future growth. The companion, and equally important, element of that plan focuses on environmentally sensitive features that should be protected from urban development. The Wisconsin Department of Natural Resources (WisDNR) guidance incorporated in the *Urban Sewer Service Plan* recommends that lands delineated as environmentally sensitive areas not be developed for intensive urban use. The WisDNR guidelines, contained in Appendix C, describe environmentally sensitive areas as "Major areas that are unsuitable for the installation of waste water treatment systems because of physical or environmental constraints are to be excluded from the service area. Areas to be considered for exclusion from the sewer service area because of the potential for adverse impacts on the quality of the waters of the state from both point and nonpoint sources of pollution include, but are not limited to, wetlands, shorelands, floodways and floodplains, steep slopes, highly erodible soils and other limiting soil types, groundwater recharge areas, and other such physical constraints." (NR 121.05(1)(g)2.c.). The identification of environmentally sensitive areas is intended to provide for the long term protection of wildlife habitat and recreation areas; reduce runoff and erosion damage along lakes and rivers; preserve the quality of surface and groundwater; guide development to protect environmentally sensitive areas; prevent excessive non-point source pollution; and reduce public utility costs.

Map 12 inserted here  
Generalized Land Use

Map 13 inserted here  
Projected Future Land Use

The environmentally sensitive areas that were identified through this planning effort are depicted on Map 14, and are defined as:

- All regulated wetlands, greater than five acres, delineated on the Wisconsin Wetlands Inventory maps.
- All areas within the Federal Emergency Management Agency delineated 100-year flood hazard zones.
- All areas of 20% or greater slope.

The identified water bodies and environmentally sensitive areas encompass approximately 17,554 acres within the planning area.

In addition, unrestricted wetlands of less than five acres were included on Map 14 as a point symbol for the purpose of flagging any proposed sewer extensions or hookups which may infringe on these environmentally sensitive areas. Their identification is only intended as notification to local municipalities of their presence near existing or proposed development.

The environmentally sensitive areas depicted on Map 14 include most of those areas found within the MPA. However, in addition to the environmentally sensitive areas, other areas identified for environmental constraint are found in the planning area. These include parks and recreation areas, natural and scientific areas, prime farmlands, historical sites, and designated wellhead protection zones. Refer to Map 15 for the other identified areas of environmental constraints.

The developed parks and recreation areas and designated open spaces are identified on the existing and future land use maps and have also been included in Map 15 as other areas of environmental constraints. The importance of these recreation areas for both active and passive recreational activities for planning area residents is well documented in municipal plans. Preserving these and other similar areas contribute to the quality of life experienced by area residents and visitors alike.

The WisDNR, Bureau of Endangered Resources, conducts research to identify natural areas and endangered plants and animals. Due to the sensitive nature of the endangered resources, their exact locations cannot be identified. However, several endangered birds, butterflies and fish have been identified in the planning area, along with four natural areas. The natural areas identified on Map 15 include: the Chippewa Falls-Eau Claire Railroad Prairie; the Union Pacific Railroad Prairie; the Phillips Oxbow Lakes Natural Area; and Putnam Park.

Prime farmlands are identified by the Soil Conservation Services' capability unit classification system as exhibiting class I, II and III soil characteristics. New development within prime farmlands must be in accordance with the Farmland

Preservation Plans of Chippewa and Eau Claire Counties. These plans have implemented procedures to direct non-farm development away from prime farmland. Prime agricultural lands are identified in the MPA in the Towns of Union and Wheaton, as well as to the east of USH 53 in the Village of Lake Hallie and to the north of the City of Chippewa Falls in the Town of Eagle Point. However, protection of these prime farmlands through exclusive agricultural zoning and/or enrollment in the farmland preservation program is minimal.

The significant presence of historical, architectural and archeological properties in the MPA has been identified and recorded by the State Historical Society of Wisconsin. A number of archeological sites recorded by the Historical Society are identified in Appendix D. Historical Society staff are also certain the area contains many undiscovered prehistoric and early historic sites. The Historical Society, in cooperation with area developers and local municipalities, will lend assistance with the surveying and evaluation of potential archeological and historical sites in the planning area to help preserve these valuable cultural assets.

Designated wellhead protection zones have been identified for wellfields serving the City of Chippewa Falls and the Village of Lake Hallie. The wellhead protection zones resulted from the development of a *Model Municipal Water Supply Wellhead Protection Plan for Chippewa County, Wisconsin*, completed in 1996.

The plan consists of the study of public water supply wells and the pollution threats to them. The plan defines wellhead protection areas and the management strategies to implement within them. A wellhead protection area is related to the surface and subsurface area surrounding a public water supply well or wellfield through which contaminants, which may have adverse health effects, are reasonably likely to move toward and reach these wells. Wellhead protection areas are delineated around municipal water supply wells to provide an area of sufficient size to protect those wells through special regulations and programs. Wellhead protection plans are implemented to limit the risk of groundwater pollution and subsequent well contamination within wellhead protection areas.

The recommended *Wellhead Protection Ordinance* is the major regulatory focus of the plan and specifies the wellhead areas to be protected and the methods for doing so. The ordinance requires monitoring of existing threats and uses regulations to limit the future risk to public water supplies. The proposed ordinance establishes a regulatory program which designates permitted, prohibited, and conditional uses within wellhead protection areas designated by municipalities with public water supplies, and sets procedures to address pre-existing threats to public water supplies in established wellhead protection areas.

Map 14 inserted here  
Environmental Corridors

Map 15 inserted here  
Sensitive Environmental Areas

## ***Land Use and Growth Management Issues***

Maps 4 and 6, presented earlier in this report, depict the projected high growth areas for population and employment in the MPA for the 25-year planning period. Those areas represent the projected expansion of developed land uses for residential, commercial, industrial, recreational, governmental/institutional and transportation purposes. The interaction between land use and the transportation infrastructure is readily apparent in the current and projected future development patterns identified for the MPA. Currently, approximately 10% of the developed land uses in the MPA are devoted to transportation infrastructure, between roads and rail lines. While the cost of providing transportation access and utility service to new development is primarily an economic consideration, there are additional social and environmental considerations that factor into the benefit/cost equation for expanding development.

Growth management is the art of trying to achieve a balance of the associated benefits and costs of not only the economic impacts, but also the social and environmental impacts of growth and development. Growth management is increasingly viewed not only as a strategy to limit growth, but also as a strategy to promote growth, spur economic development, and ensure the availability of affordable housing. An initial step toward a balanced approach to urban area growth is to identify those growth management issues that relate to urban land use and development trends. For it is only through the recognition of the cause and effect of urban growth issues that effective growth management strategies can be formulated to address the problematic issues of urban growth.

**Urban sprawl** is perhaps the largest single issue of growth management that encompasses a wide array of subordinate issues. Urban sprawl is generally considered a negative form of urban growth, performed in a haphazard fashion with little thought given to the cost-effectiveness of municipal service delivery or land use compatibility. All too often urban sprawl is associated only with municipal boundary expansions, when in fact higher density rural development along urban borders also contribute to urban sprawl. The natural progression for municipalities to grow is through the incorporation of additional land through annexation. The planned orderly growth of a municipality can oftentimes be sidetracked by requests for annexation from property owners in those higher density rural development areas who are seeking municipal sewer and water services because of the failure of their on-site sewage treatment and water supply systems. Similarly, municipalities can stray from their intended growth plans to accommodate an economic development opportunity. Any of these events can lead to an unanticipated increase in expenditures to extend municipal services along with street improvements, and the increased cost of maintaining a larger municipal street and utility system.

Urban growth is an evolutionary process. Some of it occurs according to a plan, some not. Unexpected side effects can occur under both the planned and unplanned scenarios. A typical example of this evolutionary urban growth process occurs in most small urban areas when they experience the development of their first shopping mall. The shopping mall is typically located on the urban fringe with easy access from a major highway, and provides ample off-street parking. The perceived convenience and variety afforded by the shopping mall soon attracts shoppers away from the retail sector in the municipality's downtown, leading to the decline of the downtown as a retail center and impacting its tax base. Downtown redevelopment efforts then become a focus of the municipality. As the urban area continues to grow, another larger shopping mall is developed on the now expanded urban fringe with more direct access from major highways and even more parking. This newer and larger retail development impacts not only the declining downtown retail sector, but also competes with the first shopping mall and may result in the eventual decline of the retail base of the first mall, which initiates additional redevelopment efforts to bolster another declining tax base. Urban economic growth opportunities can also present undesirable side effects by shifting growth patterns, oftentimes presenting a fine line between managed growth and urban sprawl.

**Cost-efficiency** in the provision of urban services, and who pays for them, is a concern to urban area municipalities. It is much more costly to provide streets and municipal utilities to areas developed under lower density rural development standards due to the larger lot requirements. In addition, economic incentives to businesses can also place a greater share of the cost of such improvements on the general population. New infrastructure improvements represent not only a capital cost, but also add to the on-going operational and maintenance expense to be borne by the municipality. An unbalanced investment in the provision of new urban services can often negatively impact on the ability of a municipality to keep up with the operation and maintenance of its existing infrastructure. The increasing cost of public utilities and transportation infrastructure and services place an increased emphasis on the cost-efficient use of public funds.

**Environmental protection** is another growth management issue that can be viewed from different perspectives. While the physical environment of the MPA is a major attraction for growth and development, that growth, if not guided carefully, can have a detrimental impact on the natural environment. Environmental guidance, such as contained in the *Urban Area Sewer Service Plan*, can help to identify those sensitive environmental areas and recommend measures for development to avoid or minimize a negative impact on the environment. Additional environmental protection is afforded through municipal plans and zoning ordinances, county farmland preservation plans, state shoreland and wetland regulations and health and sanitation regulations governing rural development, as well as federal laws governing air and water quality. While these and other environmental regulations afford protection to those environmental resources that are considered valuable enough by society to

warrant their preservation, they are also often viewed as restrictions to growth and development by requiring costly and time consuming studies and mitigation measures. Environmental protection in its strictest regulatory form can also reflect negatively on the cost-efficient use of public funds. However it is viewed, environmental protection will remain a key element to be addressed by growth management policies and practices.

**Public safety** is usually identified as an element of transportation, or fire and rescue and police protection. The common denominator linking these public safety issues is land use patterns. Growth and development trends influence traffic loadings on the street and highway network, affecting their designed functioning and, consequently, impact on the safety of motorists, bicyclists and pedestrians. Development patterns and land uses also affect public safety from the standpoint of response times for fire, rescue and police services. In an expanding urban environment, more resources are required to address the increased public safety needs of a growing population. An improvement to a highway corridor to address traffic congestion and roadway safety concerns must also address the adequacy of access to the surrounding area for the delivery of fire, rescue and police protection services to existing and future development. It thus becomes extremely important for public safety to coordinate transportation improvements with municipal protective services and future land use plans. Public safety is certainly integral to urban growth management.

**Environmental justice**, as it relates to land use and growth management, is generally viewed in the context of the availability of affordable housing and transportation, and employment opportunities for people with disabilities, minorities, elderly, and the economically disadvantaged. Growth management policies, or the lack of them, can have a significant impact on the social structure of an urban population. The type and placement of housing is most often determined by an economic hierarchy. The placement of nursing homes, group homes and low income housing are oftentimes located in areas of similar economically disadvantaged residents. Elderly and low income apartments may be located without adequate access to a public transit system, further impacting the limited transportation options available to the residents. While the Americans with Disabilities Act (ADA) ensures comparable paratransit service for those who qualify, all public transit users are restricted by the routing, scheduling and hours of service offered by the transit provider. Freedom of movement for the transit dependent is determined by the access provided by the public transit system.

As an urban area grows, the current trend is for employment growth to be clustered in business and industrial parks and retail malls occupying large tracts of land on the urban fringe. Access to the employment opportunities generally requires the availability of motorized transportation. That portion of the population with disabilities and in economic distress do not have the same level of access to these employment opportunities because of transportation limitations. The growth of an urban area in this manner stretches the capacity of

a fixed route transit system to operate cost-efficiently. The increased travel time demanded of the bus system to service urban fringe growth becomes less convenient to a transit rider by choice, and results in a reduction in transit usage by those with other transportation options. This, in turn, leaves the transit system serving a smaller segment of the population at increased costs and facing reductions in service. It is, however, the transit dependent segment of population who suffer the greatest impacts from a reduction in transit service due to their limited transportation options.

While the lack of personal transportation can contribute to social isolation, too much transportation can have the same effect. A street or highway capacity improvement to address a traffic congestion problem can also serve as a physical barrier to pedestrian and bicycle traffic and impede movement into and out of a particular neighborhood. Such road improvements have been known to divide neighborhoods and present difficulties for residents to access area schools, libraries and community services. Transportation improvement projects that increase automotive travel should also consider the impacts on other forms of personal travel and the affect on neighborhood and community interaction.

**Jurisdictional autonomy** leading to jurisdictional rivalry is one of the greatest obstacles urban areas have to overcome in order to develop effective growth management practices. The lack of an effective coordinated approach to growth management is the result of statutory enabling legislation that empowers all levels of government in Wisconsin to operate with similar municipal authority regardless of the capabilities of individual governmental entities to provide the services expected of urban municipalities. Jurisdictional territoriality and competition for development and increased tax base are often at the core of urban sprawl. The inability of rural and urban units of government to reach a mutual agreement on urban growth and development patterns and the cost-efficient use of public funds has contributed to land use compatibility problems along the urban fringe and, in many cases, increased the cost of eventually providing municipal utilities and transportation infrastructure improvements.

While certainly not all inclusive, these six land use and growth management issues effectively identify some of the principal concerns associated with urban growing pains and the difficulty with trying to address them. It is readily apparent from on-going statewide discussions on the need to address these and other land use issues that no concise, coordinated and workable approach is uniformly supported by the many units of local government in the state with the responsibility for managing land use. In spite of the state's renewed emphasis on comprehensive planning, and its requirement for intergovernmental cooperation, the self-policing aspect of this legislative requirement does little to ensure an effective outcome. The comprehensive planning legislation has failed to take into account the statutory impediments of existing enabling legislation and its empowerment of the many diverse local units of government in the state. Without an implementation incentive to encourage increased intergovernmental

cooperation among local units of government on land use and growth management issues, current obstacles will be difficult to overcome. In the absence of any statewide consensus on addressing land use and growth management issues, local units of government in expanding urban areas will continue to deal individually in trying to develop cooperative approaches to address their land use and growth management issues. Hopefully, the identification of these common issues can serve as a catalyst toward improving coordination between municipalities in the Chippewa-Eau Claire planning area and provide a platform for addressing those mutual concerns.

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