

Comprehensive Plan

Of the City of Sandwich

Approved by the City Council Ordinance 2003-40 November 10, 2003

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City of Sandwich **Comprehensive Plan**

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Revisions to the Comprehensive Plan

<u>Ordinance 2011-05</u> – Ordinance Amending the Official Map as an Amendment to the Comprehensive Plan for the City of Sandwich, DeKalb and Kendall Counties, Illinois, and for the Contiguous Unincorporated Area in DeKalb, Kendall, and LaSalle Counties within One and One-Half Miles of the Corporate Limits of the City of Sandwich, Illinois (*passed June 13, 2011*)

City of Sandwich Comprehensive Plan

I. INTRODUCTION

The Comprehensive Plan for Sandwich (the Sandwich Plan, or the Plan) was prepared in conjunction with the comprehensive plans for ten (10) other DeKalb County communities. These communities include Genoa, Hinckley, Kingston, Kirkland, Lee, Malta, Shabbona, Somonauk, Sycamore and Waterman. All eleven (11) comprehensive plans were started under the auspices of DeKalb County, but each plan was prepared by the people and officials of a given community.

The reason for creating comprehensive plans for eleven communities simultaneously was to bring in a level of uniformity to the analysis of prevailing conditions in the County, the overall methodology and the process for plan preparation. In addition, DeKalb County deemed it necessary for each community to prepare its own plan first, before the County could draw up a County-wide Plan. The County wanted to prepare its plan based on the plans of each community.

Land Vision, Incorporated (LVI) was selected by the County to act as the consultant for each of the communities and prepare the eleven comprehensive plans. LVI advocated a "ground-up" plan preparation process that began with the citizens and officials of a community. LVI helped people identify their preferences for the built environment through an Image Preference Survey; it helped people ascertain the issues faced by their community through an Attitude Preference Questionnaire, and through Design Charrettes, LVI helped the citizens prepare concept plans for the future of their community.

The Sandwich Plan, along with the plans for other DeKalb County communities, marks an important stage in the county's overall development. Each of the DeKalb County communities, including Sandwich, has used this opportunity to take a long view of its future and prepared a plan that could accommodate growth for the next thirty to forty years.

A. PURPOSE OF SANDWICH LAND USE PLAN

From a local perspective, the purpose of the Sandwich Plan is to define the future of the community that the citizens and officials of Sandwich have indicated they prefer. By adopting the Plan, the City does not intend to limit or prohibit growth. Instead, the City wants to encourage growth that improves the quality of life in the community and helps provide cost-effective public services for its residents.

The adopted Plan will guide public and private decisions regarding physical development of the City. As such, the Plan may be the basis for the update of the City's Zoning Ordinance, Subdivision Ordinance, and other community efforts like a Downtown Plan or a Community Facilities Plan.

B. SCOPE OF WORK

A Comprehensive Plan typically includes detailed analyses and recommendations covering a community's natural resources, transportation and housing conditions, community facilities and telecommunications infrastructure, as well as economic development. However, the main scope of this Plan is limited to the Land Use Plan and Community Design. This is a point of departure for a comprehensive plan in that it would help a community not only locate different land uses according to the Land Use Plan, but also help build a community that has identity and character, because of its emphasis on Community Design.

As such, this report includes: 1) A broad based map showing the Future Land Use Plan (Figure 17) for Sandwich that provides a pattern for location and general distribution of land uses, and the process which enabled the preparation of the Plan, and 2) A set of design principles that would guide how the community is built in the future project by project.

In addition, given the role of agriculture in DeKalb County—as well as Sandwich's heritage—agriculture protection is an underlying component of the Plan. While agriculture is the dominant industry in the County, technology and economics have reduced the direct ties to agricultural production that once existed in Sandwich. Still, agriculture remains a key force in the County's economy, a dominant feature on the County's landscape, and a defining feature of the communities in the County, including Sandwich. To this end, the Plan provides a land use framework with which the City can aid or assist in the protection of farmland from premature development and the nuisances caused by development.

II. ISSUES AND OPPORTUNTIES

A. HISTORY

The City of Sandwich is located in Sandwich Township in DeKalb County and extends past the county line into Kendall County. The southern boundary of the city is located on the line of LaSalle County. (Figure 1 shows a general location of Sandwich in DeKalb County.)

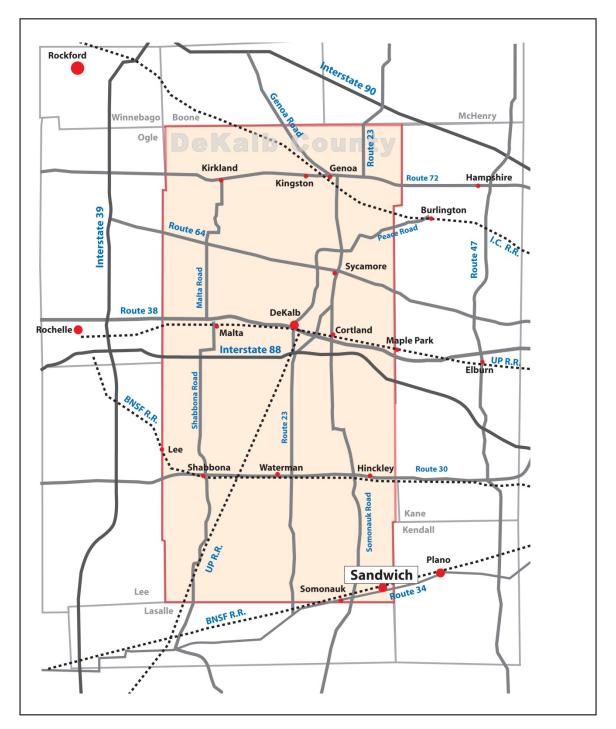
In 1834, located about three miles north of Sandwich a mail route was established. Three years later the post office was moved to a location on Somonauk Creek (location of the current Sportsmen's Club). At that time the post office was known as the Somonauk Post Office.

In 1851 the Chicago, Burlington and Quincy (CBQ) Railroad began surveying the railroad and in 1853 the CBQ Railroad had finished construction with a stretch through Sandwich. The plat survey for Sandwich was completed in the winter of 1854 and filed in January 1855. At this time the location of the train station had not been determined. People of nearby Newark wanted a station close to their town, along with other people in the vicinity. So, the train company established a flag station where trains would stop if there was a signal.

The new city needed a name and the name Almon was proposed on behalf of the owner of the plat, Almon Gage. He declined. The railroad had given the area a name called Newark Station because Newark was the community that wanted the station. The locals went with the name Newark Station until 1856 when John Wentworth, a Congressman for the area, had the name changed to Sandwich for his home town in New Hampshire. Mr. Wentworth was a major influence in getting the station and post office in the area. The Sandwich Post Office was started in 1850. The town of Sandwich was established in 1859 and became a City in 1872, after the Civil War.

On April 14, 1861, the Civil War began with the fall of the Fort Sumter. President Abraham Lincoln asked for 75,000 men on the 15th and by the following Monday, Sandwich had 112 volunteers with uniforms that were made by women in Sandwich. The company was assigned to the 10th Regiment Illinois Volunteers Infantry. Throughout the war, 311 men volunteered from Sandwich Township.

In 1878, the building housing the Sandwich Opera House and City Hall was constructed. This was a multi-purpose building that included the city offices, fire station and police station. The second floor became the Opera House which held a variety of activities. In 1979, the building was placed on the



National Register of Historic Places and work began to restore the historic building. The restoration was completed in 1986.

Figure 1: Location of Sandwich in DeKalb County

B. DEMOGRAPHICS

1. Population Growth

From 1970 to 2000 Sandwich's population grew from 5,046 to 6,509. As shown in Figure 2, while the decades from 1970 to 1980 and 1980 to 1990 experienced relatively small growth, in the last decade - 1990 to 2000 - the population of Sandwich increased 17%. The 2002 U.S. Census data identifies the population of the City of Sandwich to be 6,687.

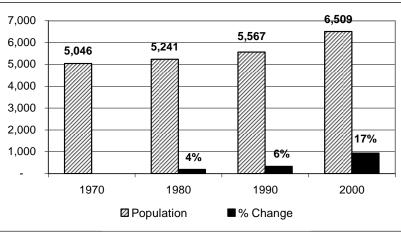


Figure 2: Population Growth

Source: U.S. Census Information

2. Age Distribution

Figure 3 shows the age distribution of Sandwich population by six age categories. From 1990 to 2000, the City saw increase in all age groups except for the slight decrease in the 65 years and older age group.

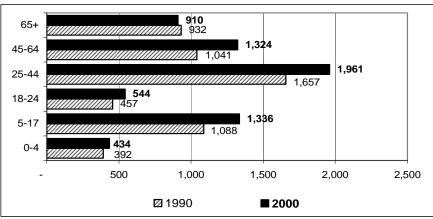


Figure 3: Age Distribution of Population

Source: U.S. Census Information

Overall, though, as Figure 4 shows, the median age of the Sandwich population is increasing.

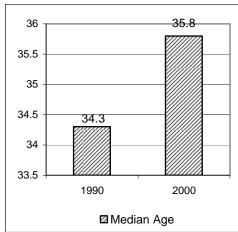


Figure 4: Median Age of Sandwich Population

Source: U.S. Census Information

3. Educational Attainment

More people of Sandwich overall were better educated in 2000 than in 1990. As shown in Figure 5, the total number of educated people in the City increased from 4,080 in 1990 to 4,768 in 2000.

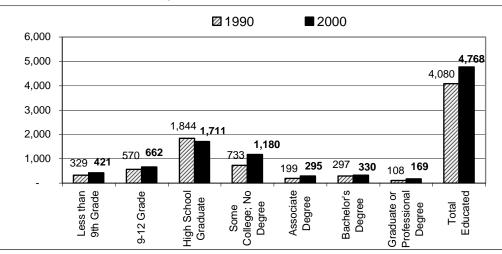


Figure 5: Educational Attainment

Source: U.S. Census Information

As seen in Figure 6, the number of people with higher education – those with some college without a degree to graduates with professional degrees – saw a significant increase -- over a quarter more people from 1990 to 2000.

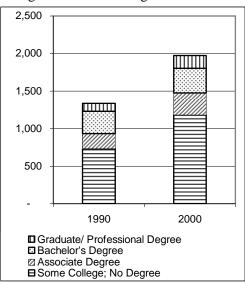
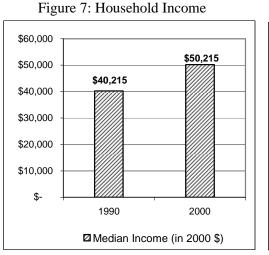


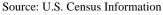
Figure 6: Level of Higher Education

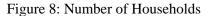
Source: U.S. Census Information

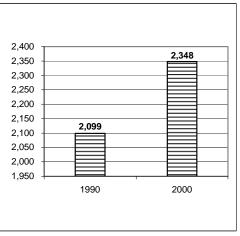
4. Median Household Income

Figure 7 shows that the median household income in Sandwich increased from \$40,215 in 1990 (in constant 2000 dollars) to \$50,215 for 2000. There was also an increase in the number of households in Sandwich (Figure 8) from 2,099 in 1990 to 2,384 in 2000. This shows that even as the number of households in the city is increasing the household incomes have also been rising in the last decade.







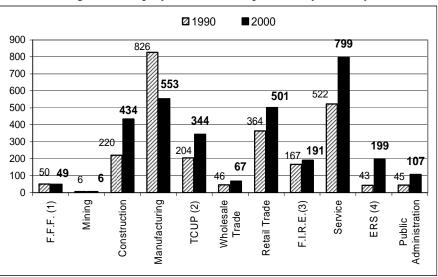


Source: U.S. Census Information

5. Employed Civilian Population (Labor Force) by Industry

Along with the increase in number of households in Sandwich, the number of people who are employed has also been increasing. Figure 9 shows that every type of industry employed more people of Sandwich in 2000 than in 1990, except for Manufacturing that saw a significant decline. The other two industries that did not see decreases but remained stable were Farming, Forestry and Fishing and Mining, employing very small numbers of people from Sandwich.

Industries that saw maximum increases in the number of people employed from Sandwich included: Services, Retail Trade and Construction.



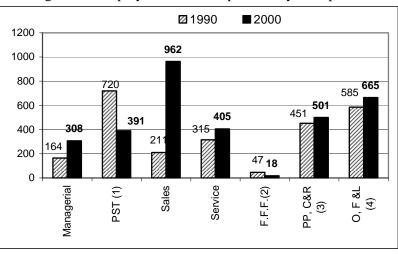


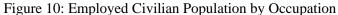
Source: U.S. Census Information

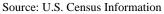
(1) F.F.F.: Farming, Forestry and Fisheries; (2) TCUP: Transportation, Communication and Public Utilities; (3) F.I.R.E.: Finance, Insurance and Real Estate; (4) ERS: Entertainment and Recreation Services

6. Employed Civilian Population (Labor Force) by Occupation

As reflected in the data on jobs by type of industry, people of Sandwich with sales jobs saw the biggest jump -- increasing almost five-fold – from 1990 to 2000 (Figure 10). The number of managers increased almost two-fold for the same decade. While all other job categories also experienced gains, the only category that saw a decline was "Professional, Specialty and Technical," reducing by almost half its number in 1990.







(1) PST: Professional, Specialty and Technical; (2): Framing, Forestry and Fisheries; (3) PP, & CR: Precision Production; Craft & Repair; (4) O, F&L: Operators, Fabricators and Laborers

7. Residential Building Activity

Figure 11 shows the extent of ownership of residential units in the city. Out of a total of 2,481 units in 2000, over two-thirds were owner-occupied. In 1990, the ratio of owner-occupied units was about the same: 1,423 out of 2,158 units, or 66%. The number of vacant units both in 1990 and 2000 was very small, ranging from 3% to 4%.

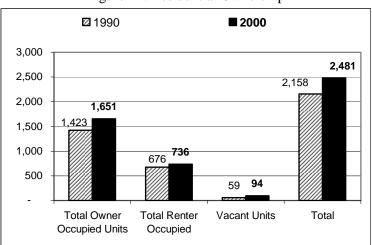


Figure 11: Residential Ownership

Source: DeKalb County Planning & Zoning Department

Figure 12 shows the number of permits issued for residential units in Sandwich in 1990 and 2000. By far the greatest number of permits issued in each of the years was for single-family units. As compared to 1990, the number of permits issued for single family dwellings in 2000 increased by 250 units. The other type of permit activity that saw a significant increase was for buildings with 20 to 49 units. In this category, the number of units increased from 4 in 1990 to 43 in 2000, or a tenfold increase.

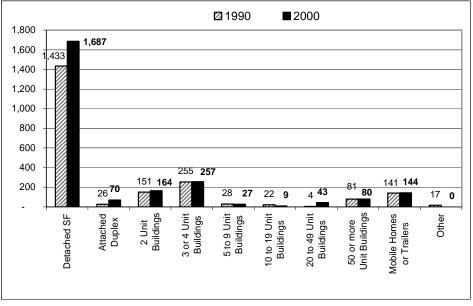


Figure 12: Number of Units by Building Type

Source: DeKalb County Planning & Zoning Department

III. EXISTING LAND USES

Sandwich's corporate limits extend into DeKalb and Kendall Counties and currently border LaSalle County. The City has many different land uses that include an airport, a golf course community and large industrial sites. However, the predominant land use in the City is single-family residential. Some of the City's neighborhoods are distinguished by mixed residential uses with single-family and small amounts of multiple family uses in the same neighborhood and even on the same block.

The Little Rock Creek is located on the City's east side. Along U.S. Route 34 (Church Street) towards the east, the City has a number of car dealerships. Along the same route, a majority of the single-family homes have been converted into commercial buildings.

The Burlington Northern Santa Fe Railroad divides the City into two parts. The central business district is found along both Church Street and Railroad Street between Terry Street and Main Street. Some of the central business district spills over to the north side of the railroad. The commercial uses in the downtown include mixed-use buildings with businesses on the first floor and apartments on the second floor, and bars and restaurants. While the downtown appears to be thriving, some of the buildings in the downtown need maintenance and upkeep.

The Sandwich Community Unit School District #430 has a school campus located on South Wells Street. The high school, an elementary school, and a middle school are located on this campus along with the athletic fields. There are large multi-family residential buildings south of Church Street near the school campus that would benefit from rehabilitation. The Sandwich Park District baseball fields are located to the west of Main Street and south of Fayette Street. Further south on Main Street are newer single family housing developments (Webb's Subdivision and Thomas' Subdivision) on the east side. On the west side of Main Street is an older subdivision (Sunset Manor Subdivision) with homes that are conventional in both lot and home size. Most of the homes in the older section of town are relatively small on small lots.

Further to the west on U.S. Route 34 is an airport residential community with adjacent commercial buildings. The homes in the Woodlake Landing Subdivisions of this area are of good size on large lots. Lake Holiday is located to the south of this residential community. North of this development (north of Church Street and the BNSF Railroad tracks) is the Sandwich Fairgrounds. Edgebrook Subdivision, a golf course community, is located to the south of the Sandwich Fairgrounds and along the eastern banks of the Somonauk Creek. Edgebrook Country Club is located along Suydam Road and Somonauk Creek. Also located south of the fairgrounds and east of Edgebrook Subdivision is the Triangle Mobile Home.

Industrially zoned sites are generally present between Reimann Avenue and Duvick Avenue, and between the BNSF Railroad tracks and Sixth Street. Some of these industrial sites are currently vacant and are ready for redevelopment. East of Duvick Avenue, a large area is zoned for industrial development as well. Most of the residences north of the BNSF tracks are traditional single family homes with smaller lots. To the far northeast, the Sandhurst Subdivision is comprised of larger lots and houses with a few segregated mutil-family areas. West of Sandhurst Subdivision along Latham Street and Knights Road, the Knight's Third Addition homes, which have recently been constructed, are large homes with smaller lots. The Knight's Third Addition construction is adjacent to the Valley West Community Hospital, which is located on the northeast corner of Main Street and Pleasant Avenue. Older homes continue to the west of the hospital to Castle Street, where a new subdivision, Fairwinds of Sandwich, is under construction. Prairie View Elementary School and Milestone Park are adjacent to the new Fairwinds of Sandwich subdivision. Figure 13 provides a breakdown of land uses existing in Sandwich as of September 2002. Single-family detached residential areas made up half of the total land within the corporate boundaries of Sandwich. Among the rest of the land use categories, Open Space and Civic Uses made up a comparatively large share, 13% and 10% of the total, respectively. The City also had a small amount of farmland within its corporate limits.

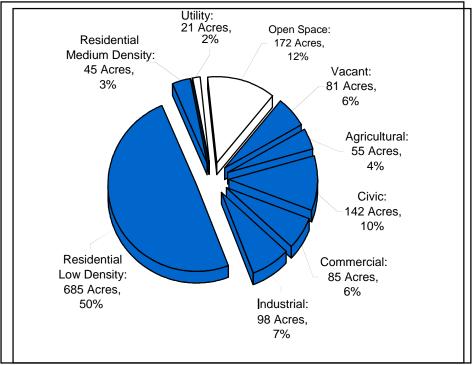


Figure 13: Existing Land Uses

Source: 2002 Land Use Survey by LVI; Data by IMO, DeKalb County

IV. CIRCULATION AND TRANSPORTATION

The roadway network in the Greater Sandwich Region consists of major arterials that include U.S. Route 34 (Church Street), East Sandwich Road (Latham Street), West Sandwich Road (Castle Street), Somonauk Road, Sheridan Road, Suydam Road and County Line Road. These roadways play a vital role in making the city a center in the tri-county region of DeKalb, Kendall, and LaSalle Counties. U.S. Route 34 especially is the busiest of the arterials in the region, providing access to the city center and connecting the city to distant communities in the Chicago region.

The City recently has proposed a new arterial roadway – called Fairwind Boulevard -- to facilitate northsouth traffic along the west side of the city and provide better access to the Sandwich Fairgrounds. This roadway is planned to extend West Sandwich Road south of Pratt Road down to Sheridan Road in LaSalle County. The intersection of Fairwind Boulevard and Church Street (U.S. Route 34) will result in a major four-way improvement and have the potential to attract new commercial centers at this location.

The City is also working with the Sandwich Park District to preserve the right-of-way for extending Latham Street south of Church Street to connect to Millington Road. This street extension is needed to provide more thorough north-south traffic routes through the community and create opportunities for new commercial uses in its vicinity.

The Sandwich area is served by Burlington Northern Railroad freight service. In the early 1990's, the service line carried about forty freight trains daily. The rail line connects Sandwich to the City of Aurora to the east. From Aurora, the Regional Transportation Authority (RTA) runs the commuter line service to the City of Chicago. Certain rail transportation initiatives proposed by Metra (the Chicago region's commuter rail division) such as the STAR project that will provide a circumferential commuter rail route around the Chicago suburbs, may offer new commuter rail options for the people living in the Sandwich area.

The City of Sandwich has a private airfield known as the Sandwich Airport. The airport has a capacity for 300 private aircrafts and has two runways.

Sandwich is the third largest community in DeKalb County -- both in terms of its population and the land area it covers. The continued success of the city in terms of its future growth in a large part will depend on capitalizing on the city's transportation advantages. The City of Sandwich is thus planning ahead for major roadway improvements commensurate with its land use plan for the future.

V. COMMUNITY FACILITIES

The purpose of this element is to provide an inventory of community facilities and to ensure that public facilities are provided as needed.

At present, the following public facilities or uses are located in Sandwich:

- 1. City Hall/City Hall Annex Opera House
- 2. Sandwich Township Public Library
- 3. Seven schools, including a vocational programs facility
- 4. Six community parks
- 5. Stone Hill Museum
- 6. Valley West Community Hospital
- 7. U.S. Post Office
- 8. Nine churches
- 9. Sandwich Fire Department and Ambulance
- 10. Sandwich Police Department
- 11. Water treatment facilities
- 12. Wastewater treatment facility

The City of Sandwich offers a rich variety of community facilities to the area residents. Some of the key facilities in the city are highlighted below.

The Sandwich City Hall and the City Hall Annex are located in the city's downtown. The City Hall, in addition to serving city hall activities, also functions as an opera house. Completely renovated and restored in 1986, the City Hall/Opera House is listed on the National Register of Historic Places and holds many performing arts and community related events throughout the year.

The City has seven educational facilities that include four elementary, one junior high and one senior high school. In addition, the City also has the Indian Valley Vocational Center that offers technical skill training programs for eleven area schools.

Established in 1966, the Sandwich Park District operates six parks in the City.

Sandwich is a popular destination in the region for the annual Sandwich Fair. The Sandwich Fairgrounds cover 154 acres and attract the highest number of exhibitors. The Fairgrounds also holds one of the most famous antiques fairs in the Chicago region.

Sandwich also has the 68-bed Valley West Community Hospital that provides high quality health and medical services to the area residents.

In addition to the above community facilities, the City has a strong program of public infrastructure. The City's water facilities have a storage capacity of over a million gallons of water and a treatment capacity of 2.0 million gallons per day. The design average flow for the wastewater treatment facility is 1.5 million gallons per day at the recently expanded facility.

The Sandwich Fire Protection District recently completed a new fire station facility to serve the needs of a growing Sandwich region.

With the help of the Sandwich Comprehensive Plan, the City would have the opportunity to assess the additional needs of future population and businesses, and undertake a comprehensive capital improvement program. Such a program would itemize the municipal and public infrastructure improvements the community is likely to need, along with budget estimates and dates the facilities may be provided.

VI. TELECOMMUNICATIONS INFRASTRUCTURE

Telephone, personal wireless communication devices, and the Internet are a few of the types of communication being revolutionized today. The tools and technologies being developed and implemented today will have repercussions in the future and could materially affect quality of life and economic development in Sandwich in the future. The purpose of this element is to coordinate telecommunications initiatives in the region and encourage investment in the most advanced technologies.

The deregulation of the telecommunications industry and the providers of telecommunications services have shifted the burden of providing the latest in telecommunication technology and service on local governments.

The City of Sandwich already has digital switching and fiber optics companies serving the community. However, citizens are no longer guaranteed the latest advances in telecommunications service or facilities. Local governments will need to be vigilant about the services being provided in the community to be certain businesses and residents are being provided the very latest telecommunications technologies and to remain competitive in the economic development sphere.

Because Sandwich alone may not possess the resources necessary to attract or retain the telecommunications infrastructure necessary to keep it competitive for economic development purposes, it should seek to partner with other communities in DeKalb County to ensure that the latest advances in telecommunications are provided in the city.

VII. HOUSING

The purpose of this element of the Sandwich Comprehensive Plan is to document the present and future needs for housing in Sandwich, including affordability and special needs such as accessibility. It should also address the current barriers to housing and assess the condition of the local housing stock. In

addition, this element should recommend strategies and programs to address the needs for a range of housing options in Sandwich.

Currently, Sandwich's housing stock is primarily single-family in character. However, there are a number of buildings designed or used for multi-family. The city's housing inventory currently is in good condition. Ongoing building and property maintenance code enforcement will be needed in the City to prevent the condition of the housing stock from deteriorating and materially affecting the appearance and value of other properties in the City.

Owning a home continues to be the American dream. Whether it remains a dream or is attainable for many people depends upon local government practices, as much as job security and mortgage interest rates. Housing affordability is among the factors of the decisions the City makes about the permitted lot sizes and densities.

For the future, it is possible that the demand for housing will be different. The increasing differentiation among the buyers in the market will place demands for new and different housing choices in the future. The City will be faced with new challenges in the future to meet the increasingly diverse housing needs.

The Sandwich Comprehensive Plan emphasizes the development of a variety of densities in residential neighborhoods that will meet a wide range of housing needs.

VIII. ECONOMIC DEVELOPMENT

As Sandwich is at the junction of the DeKalb, Kendall and LaSalle Counties, it plays a key role in the tricounty region's economy, commerce and culture. A major component of the Sandwich Comprehensive Plan is to attract tax base and bring employment opportunities for the residents of the City and region.

Significant new development activity continues to occur within and surrounding the City of Sandwich. Over half a dozen new residential developments are either being developed or near completion within the City. In the communities of the Plano, Somonauk, and the Greater Sandwich Region, another 20 new subdivisions are under construction. The region has also experienced robust retail growth over the last few years that included retail centers and individual establishments. In addition, the area saw growth in commercial office and industrial projects.

Through its Office of Economic Development (OED), the City is actively marketing and promoting the available opportunities areas for new commercial development in and around the city. The OED also works closely with area businesses and actively pursues development trade organizations and their representatives.

A key to future economic growth is infrastructure development. As described in the section on "Circulation and Transportation," the City of Sandwich is actively planning ahead to increase the transportation capacity of important major arterials serving the City and the Greater Sandwich region. Some of the key roadways that are planned to be improved include Fairwind Boulevard and the Latham Street Extension.

Similarly, the other major infrastructure developments the community is currently undertaking include: 1) Extend water and sewer lines along U.S. 34 to serve new commercial growth, and 2) Build a new Middle School to serve the growing population. In addition, the Sandwich Fire Protection District recently completed the construction of a new fire station to serve the needs of the Greater Sandwich region.

IX. NATURAL RESOURCES

The purpose of this element is to identify and define the natural resources in the community with respect to water, flora and fauna and to assess the relative importance of these resources to the community.

Given that Sandwich is situated in the midst of an active farming landscape, the *land* is the natural resource in the community. The landscape in the planning area is flat to gently rolling and is well-drained, contributing to its suitability for farming activities.

Woodlands and regulated floodplains are found along the local waterways. These local waterways include Somonauk Creek, Harvey Creek, and Little Rock Creek.

X. AGRICULTURAL PRESERVATION

While agriculture is the dominant industry in DeKalb County, technology and economy have reduced the direct ties to agricultural production that once existed in the community. Nonetheless, agriculture remains a key force in the economy and is a dominant feature on the landscape, and a defining feature of the communities in the Counties.

To this end, the Sandwich Comprehensive Plan attempts to provide a framework with which the City can aid or assist in the protection of farmland from premature development and the nuisances caused by development.

Agriculture preservation is high on residents' list of goals. One of the most effective ways to keep farmland economically viable is to support industries and initiatives that increase or provide new markets for agricultural products. The City is sympathetic to right-to-farm legislation and encourages an ongoing dialogue with surrounding farmers in order to prolong the economic viability of farming operations around Sandwich.

XI. PUBLIC PARTICIPATION

A. PLAN PREPARATION PROCESS

The plan development process advocated by Land Vision, Incorporated (or LVI, the project consultants) begins with input from the citizens of a community, to help identify their visions for the future of their community. This initial phase of the plan development included an Image Preference Survey (IPS) where 30 Sandwich citizens responded with their likes and dislikes regarding how communities are built (Appendix A describes in detail the citizens' responses to the IPS). About 20 Sandwich residents participated in a Design Charrette in three teams and prepared the following plans for their community.

B. THE CHARRETTE PLANS

1. Team 1 Plan (Figure 14):

Primarily expanding the residential areas of the city, this team recommended residential growth to occur all around the city. Most of this residential growth was shown to be low-density residential, with a couple areas shown for medium density residential.

This team showed a few areas of the city to include mixed uses, with a combination of commercial and residential uses. These mixed-uses were mainly distributed in the north-south corridor between Coy Road and 4650th Road, bounded on the west by Main Street and east by Sandy Bluff Road.

This team recommended that commercial uses be located along the length of U.S. 34 corridor and also in three large centers. The centers were located at the intersections of Main Street and 4650th Road; Millhurst Road and Millington Road, and between East Sandwich Road and Cook Road, along Pratt Road.

In addition, this team proposed a major civic center located west of the Main Street between County Line Road and 4650th Road. It also proposed to locate a new high school site north of the existing city, along Coy Road. In addition, the existing fairgrounds site was proposed for expansion by this team.

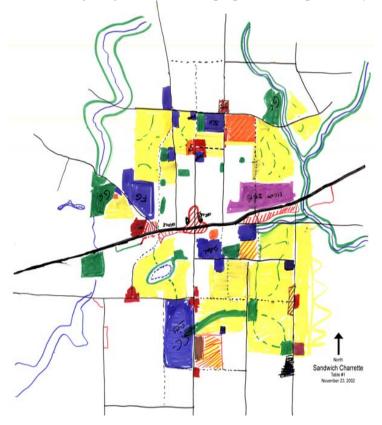


Figure 14: Team 1 Plan

2. Team 2 Plan (Figure 15):

The major thrust of this team's recommendation included capturing future growth while at the same time preserving farmland in close proximity to the city. This team showed the entire area east of Main Street and south of 4650th Road as an agricultural preserve. This team also recommended keeping open space green belts around all sides of the city.

To the north, this team recommended low-density residential uses that extended almost all the way north to Chicago Road. This team proposed an open space system along the flood plains of Somonauk Creek and the Little Rock Creek.

In addition, this team included a large area for industrial uses between Duvick Road and Creek Road. The Burlington Northern Santa Fe (BNSF) Railway Company has tracks running along the southern boundary of this area. As such, this team also proposed to locate a commuter station along these tracks, within the industrial area, close to the intersection of U.S. Route 34 and Sandy Bluff Road.

Concerned with the future need for community services, this team proposed an expansion of the existing hospital and showed sites for two new schools, one to the north of the city and other to the south. Also, this team recommended that the City should have bike paths around the fairgrounds and to the south of the city.

In order to create an identifiable image of the city, this team recommended that there be gateway features on both sides of the city along the U.S. Route 34. The team also made sure that U.S. Route 34 would have retail opportunities almost all along the entire length of U.S. Route 34 though the city.

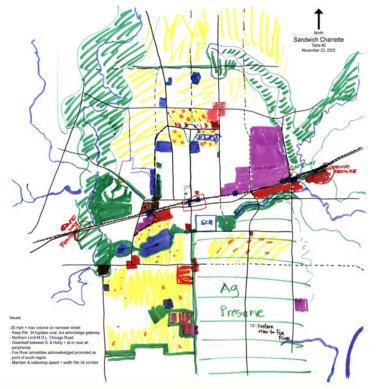


Figure 15: Team 2 Plan

3. Team 3 Plan (Figure 16):

Unlike the first two teams, this team was less extensive in the area covered by its plan. The majority of the team's recommendation consisted of low-density residential uses. This residential growth extended from Pratt Road to Coy Road to the north of the city, and between Griswold Springs Road and County Line Road on the city's southeast side.

Like the other two teams, this team showed a large industrial park along the BNSF railroad -- between Cook and Duvick Roads. Plus, this team proposed to locate most of its retail uses in strip shopping centers along U.S. 34 as well as in the corridor along the current and extended County Line Road.

This team also recognized the need to provide for more community services in the future and showed expansion of the existing Valley West hospital. Like the second team, it also identified the need to build bike paths through the city. In addition, this team felt that the City should consider opening a new college located on the south side of the city.

Considering the prospects of future growth, this team recommended that the City should look into establishing growth boundaries to the south and west of the city.

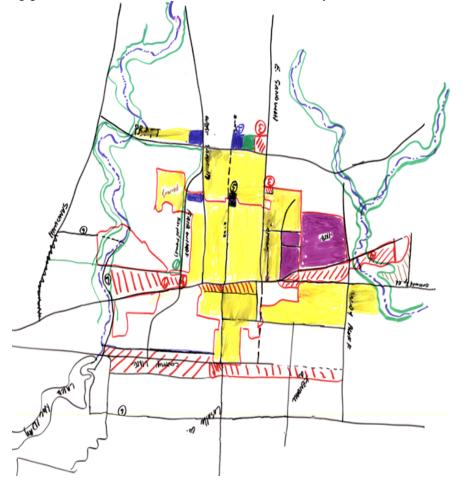


Figure 16: Team 3 Plan

C. SUMMARY OF CITIZENS' VISIONS

While dissimilar in terms of the extent of growth the three teams included in their plans, all three showed a large industrial park practically at the same location. All three also proposed to locate future retail commercial uses in the U.S. Route 34 corridor and at major intersections north and south of the city.

All three teams identified the need for future expansion of the existing Valley West Community Hospital, and two of the three teams recommended building a new high school in the future. While one team showed locations for new school sites on both the north and south of the city, the other proposed locating one school north of the city.

Perhaps the most significant difference among the three teams' recommendation was the proposal for keeping the area south of the city, east of Main Street as open space. The primary reason for this recommendation was to keep southeastern views to the Fox River open for the long-term, thus adding to the quality of life for the residents of Sandwich.

As each of the three teams presented their plans to others during the final phase of the charrette process, they identified the following issues as being important to be addressed by the Land Use Plan. The list below is a composite of issues identified by the three teams.

Issues identified by the Charrette participants (not in any order):

- Keep views to the Fox River open
- Connect environmental corridors and create bike paths to the Sandwich Fairgrounds
- Provide gateways to the city from east and west, along U.S. Route 34
- Expand Valley West Community Hospital
- Redevelop existing central business district
- Preserve agricultural land
- Provide a commuter train station within the proposed industrial park
- Bring industry to the city
- Establish growth boundaries to the south and west
- Provide open space green belts all around the city

Based on the issues identified by the citizens during the charrette plans, the following goals and policies were the basis for preparing the Sandwich Plan.

D. GOALS AND POLICIES

1. Goals

Specifically, Sandwich will accept growth as long as it helps meet the following community goals:

- a. Growth and development will not exceed the availability or capacity of public facilities and services.
- b. Growth and development will allow the City government to provide cost-effective infrastructure and services for the health, safety and welfare of the City of Sandwich and its residents.
- c. New neighborhoods will reflect the character and appearance of the City's existing neighborhoods as modified by modern codes and ordinances.
- d. New developments in close proximity to the surrounding farms will respect farm operations and needs.
- e. Growth and development will create opportunities for new employment, shopping, recreation and community interaction.
- f. Growth and development will not undermine the City's financial health or creditworthiness.
- g. Growth and development will improve the quality of life in Sandwich.

2. Policies

To achieve the above goals, the following policies should govern the physical change, development and growth of Sandwich and its neighborhoods.

- a. Growth and development shall be encouraged to be contiguous to the corporate limits.
- b. Future neighborhoods should be designed and developed first for people, with the pedestrian as the principal design determinant. Sidewalks should be provided along all streets and parkways should be provided between the streets and sidewalks. Buildings should be oriented toward the street and have pedestrian scaled proportions and details. For residential buildings, such details may include porches.
- c. A diversity of uses, building types and street types should be provided in each neighborhood in conformance with existing codes and ordinances.
- d. An interconnected network of streets should be established. Streets should connect one neighborhood to the next. As much as possible, cul-de-sacs should be minimized. Blocks should be kept to a reasonable length to facilitate convenient pedestrian movement.
- e. In residential areas, the influence of the motor vehicle could be diminished by placing garages off alleys or setting them back from the front building line of the house. For commercial uses, parking lots should be placed behind buildings. In all areas, streets should be designed to calm traffic.
- f. Parks should be provided within an average of five-minute walking distance of most residences in the neighborhoods of Sandwich.
- g. Mixed-use buildings should be considered for possible location in the existing downtown area and in the new neighborhood commercial areas.
- h. Storm water management should be provided in all new neighborhoods. To the extent possible and subject to subdivision regulations and the City's engineering practices, overland drainage ways should remain in their natural state and be integrated into a stormwater management system.

- i. Native landscaping should be used wherever possible to contribute to storm water management.
- j. Developers should either build or contribute to the cost of building roads, parks, schools and other governmental infrastructure necessitated by their developmental impact. The City should consider adopting annexation policies to ensure uniformity in annexation agreements.
- k. Developments along the major arterials such as U.S. Route 34, Main Street and County Line Road should have a distinct character to help create a unique identity for the City.
- 1. Rear alleys may be provided in residential neighborhoods instead of the front driveways to improve pedestrian safety and enhance streetscape. In commercial developments, alleys may be considered to provide access to customer parking at the rear of the stores.
- m. Key parcels of land should be set aside for industrial and office uses to provide local jobs and diversify the City's tax base.
- n. Adequate municipal utility capacity should be maintained to accommodate new growth.

XII. LAND USE PLAN

A. LAND USE PLAN

In order to facilitate an easy discussion of the more detailed plan recommendations, they are grouped together as being either north or south of the city. This was useful given the city's size and because the city is bisected in northern and southern halves along U.S. Route 34 and the BNSF railroad. (See Figure 17, Land Use Plan. Also see Appendix B for Land Use Classifications.)

Building its case for future expansion based on the recommendations of the second team, LVI initially proposed that the residential growth in the northern part of the city should extend all the way to Chicago Road. This was considered to be a rational way for the city to grow, especially as it might keep the area to the southeast of the city as open space for the long run (as per the recommendation of the second team).

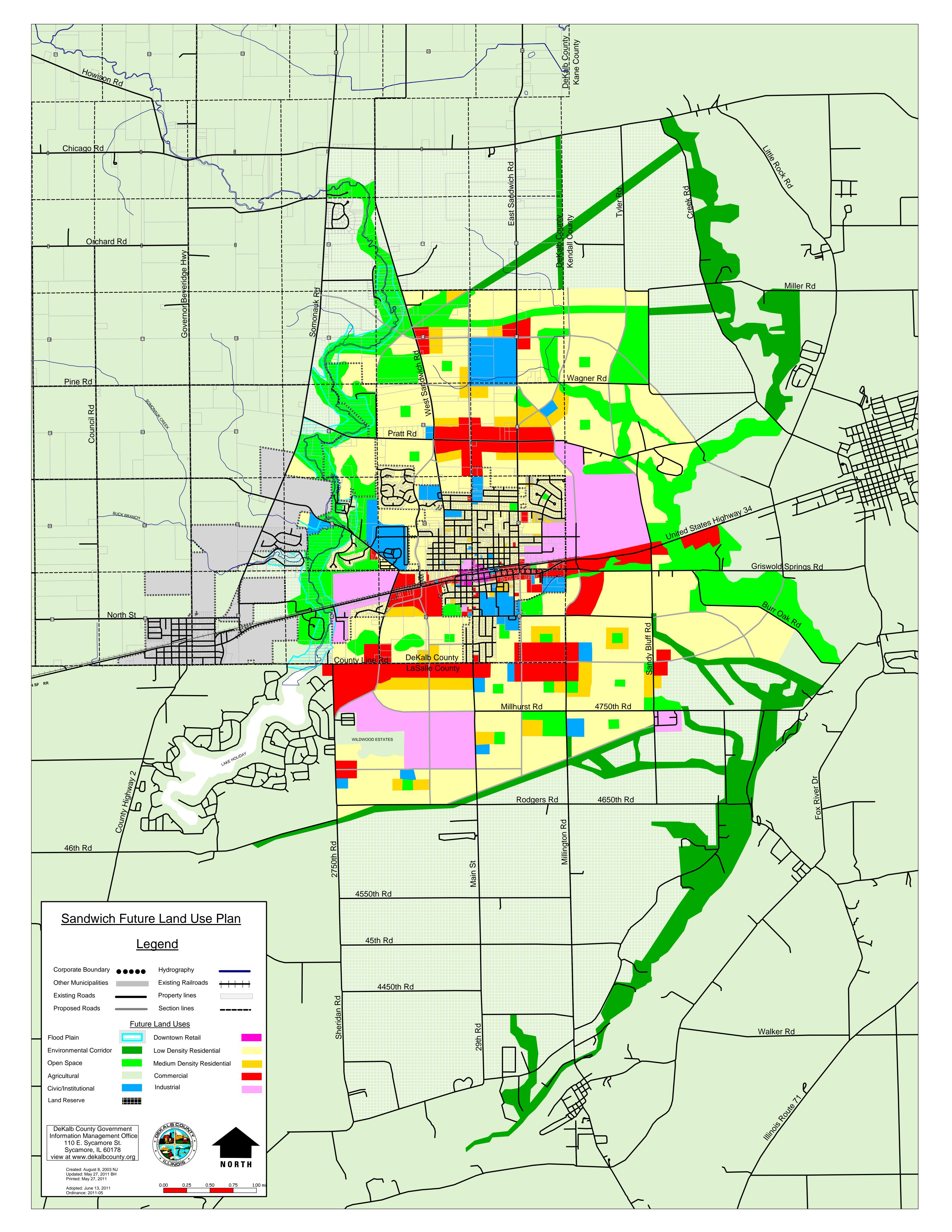
However, in its review, the City Council members suggested that the city should grow significantly in both the north and south directions, and little to the east and west. Equally importantly, the City Council members preferred to have long-term control over the areas beyond the planned land uses (both to the north and south), suggesting a policy of creating "land reserves."

Typically, for the purpose of land-use planning, a community has jurisdiction over an area up to mile and a half beyond its existing corporate boundaries. In the case of Sandwich, the City Council members wanted to consider the areas beyond this planning limit so that the areas north to Chicago Road and south to the Fox River would be influenced by the City's land-use decisions.

LVI endorsed this key strategy of the City Council, and the Land Use Plan therefore showed the areas between Coy Road and Chicago Road, and between the pipeline to the Fox River, as "Land Reserves" (see Figure 17).

To better serve the projected population to the north and south of the tracks, non-residential growth would also be in balance with the residential uses. Thus, both the north and south sides of the tracks would have commercial, industrial and civic uses.

Figure 17: Land Use Plan



1. Plan Recommendations North of the BNSF Railroad Tracks

a. Residential Growth

For the area north of the tracks, close to 3,330 acres were planned for residential growth. This area extended from the existing city limits up to Coy Road and would add over 18,600 more people north of the tracks. This area would also include dispersed sites for duplexes, apartments and townhouses. These multi-family projects would be located with limits placed on their size, the number of buildings per project, and the minimum distance between any two multi-family projects. The goal of this strategy is to have small-sized multi-family projects dispersed across the community and blend in with the predominantly single family neighborhoods. For some higher density multi-family projects, the City Council recommended that they be located along the city's north-south corridors.

Beyond the neighborhoods immediately surrounding the existing city, the area farther away from city would allow for even lower density residential growth with much larger lots and estate houses. This would create a diversity of housing opportunities in the city. In addition, the low-density residential growth at the outskirts of the city would form an appropriate transition to the agricultural uses.

b. Commercial Uses

Working with the City's approved transportation plan that established the network of roadways for the future, the intersection of Pratt Road and the East Sandwich extension was a logical location for a major commercial node. This location would be roughly at the center of the area planned for residential growth around the city to the north. In addition, a commercial node at this location, in close proximity to the proposed industrial area at the southeast corner of the same intersection, would serve customers from the industrial area equally well.

Given the goal of creating close-in commercial uses within walking distance of people living in the new residential areas, three new neighborhood commercial centers were proposed. As the Land Use Plan shows, these smaller centers would be located at the intersections of Pratt and West Sandwich Roads; West Sandwich Road and the proposed new road south of Coy Road, and the intersection of the same new road and East Sandwich Road.

c. School Expansion

Following the recommendations of at least two of the teams, LVI proposed to locate a major school building complex along East Sandwich Road, closer to the center of the area for residential growth to the north. As the city already has a high school to the south of the tracks, locating a new school to the north to better serve the new residential population to the north was a logical recommendation.

Based on discussions with the City Council, the school complex was made large enough to accommodate a new high school and have the potential to include an elementary school in the future as well as a regional recreation park. The basic concept was to make this complex into a self-sufficient educational center of the community for long time to come.

d. Hospital Expansion

As identified by the citizens during the preparation of the charrette plans, Valley West Community Hospital, located along the northern edge of the city, would require a major expansion in the future.

Accordingly, the Land Use Plan shows an area north of the existing hospital and east of the extension of Main Street for future hospital expansion.

e. Open Space System and Parks

Given that the City is located between two creeks on its two sides, it has the potential to create two open space systems that are linked together along key corridors. This would enable the City to establish an open space system that would allow the residents of Sandwich easy access to the recreational opportunities along the two creeks by walking or biking.

As the Land Use Plan (Figure 17) shows, the open space system is located along the Somonauk Creek to the west and along the Little Rock Creek to the east. In between, these two are linked by open space corridors just north and south of Coy Road, along the gas pipeline right-of-way. The City Council recommended that the creek corridors should be used as gateways into the city and farmsteads be made part of the city's open space system. These corridors could be developed to include walking and bike trails, providing Sandwich residents recreational opportunities and the means to get around the city using their bicycles.

In addition, the City Council in its review of the initial plan recommended that there should be a proliferation of park sites throughout the community. As shown in the Land Use Plan, there are a number of parks that would serve the needs of local residents in a neighborhood within a convenient walking distance of a quarter mile. The size of these parks would vary from location to location, depending on whether they are used for passive or active recreation.

f. Downtown Revitalization

LVI recommends revitalizing the existing Sandwich downtown, as this would be a major catalyst in creating a strong identity for the community. While the downtown revitalization efforts may present some challenges for the community, the scope and timing of the revitalization efforts would be critical to make it a success in anticipation of new growth coming to city.

Recommending a more specific strategy for revitalizing the downtown is outside the scope of this Plan. However, the City could consider setting up a special task force or a committee to study the downtown issues in detail. This task force would need to assess how much revitalization effort could be sustained by the current and future population; whether there would be market for specific retail and commercial uses, and as necessary, what types of financing incentives would the City need to offer to make to attract the right type of uses without excessive financial burden on the City budget.

2. Plan Recommendations South of the BNSF Railroad Tracks

a. Residential Growth

For the area south of the railroad tracks, the Land Use Plan includes 3,170 acres of low-density residential uses (see Figure 17). The majority of these residential uses are located to the southeast of the community, up to the A.N.R. pipeline. Based on the same density and household size assumptions as for the area north of the tracks, there would be about 17,500 more people south of the tracks.

b. Commercial Uses

Recognizing the key transportation role County Line Road would play after its extension east to the intersection of Griswold Springs Road and Little Rock Road, the City Council recommended locating major commercial uses along this road. With the projected population growth south of the tracks, this strategy would provide residents with more local shopping opportunities.

LVI endorsed the concept of the retail commercial uses along County line Road and recommended that these uses be developed more as commercial nodes than typical commercial strips. Since County Line Road would carry non-local traffic through the city, such a strategy would help the community attain a distinct character. The Land Use Plan shows two key commercial nodes along County Line Road: one to the southeast of the existing city and the other to its southwest. The southwest commercial node at the intersection of County Line Road and Sheridan Road was also seen as providing shopping opportunities for the residents of Lake Holiday and strengthening the City's sales tax base. Figure 18 shows a rendering of a commercial node as an illustration of the design principles used to achieve a distinct looking shopping center. (Note: Commercial node recommendations apply to the planned commercial areas north of the railroad tracks as well.)



CAMPTON SQUARE · PERSPECTIVE RENDERING

MINISCALCO

Figure 18: Illustrative example of a Commercial Node* The example above shows a commercial node with distinctive building architecture that integrates the center and gives it a unique identity. By placing parking away from the street, retail stores have a more direct exposure to people traveling on adjoining streets. This also hides a "sea of parking," usually considered unsightly by most people. In the Image Preference Survey, the citizens of Sandwich rated parking lots "exposed" to streets with high negative score. Shopping Centers such as the above Campton Square received high positive ratings by Sandwich citizens.

* Rendering of Campton Square provided by Project Architect, Miniscalco Architects, St. Charles, Illinois.

c. Industrial Uses

The Land Use Plan shows a major industrial node southwest of the County Line Road and Main Street intersection. Rogers Road extended west to link up with Fairwind Boulevard, and another proposed north-south roadway linking up to Fairwind Boulevard, would provide additional access to the industrial area at this location.

d. Civic Uses

As shown on the Land Use Plan, multiple sites are identified as opportunities for locating different civic uses in the future. With the addition of a major new school complex to the north of the tracks that would include different schools, there would probably be no more major school sites needed south of the tracks.

However, given that the population to the south of the tracks could reach 17,500 (as the Plan is fully realized), the City would need up to three more elementary schools in the future. Therefore, the Plan shows a number of locations for civic uses that could be used as school sites in the future.

In addition, the civic sites could be used for other public uses such as libraries, police stations, and community or neighborhood centers. All such specific needs would have their own site and location requirements. If necessary, the Plan could be modified to either change the location of a civic use site or its size.

e. Open Space

Similar to the Plan recommendations for parks to the north of the tracks, the south side would also have a small to large size parks, conveniently located within walking distance of residents in a neighborhood. The number and location of these parks would be determined by the actual proposals for residential projects. The multiple sites for open space in Land Use Plan are shown for illustrative purposes.

3. Proposed Transportation Routes

a. New North-South Routes

One of the key transportation goals of the City has been to provide through north-south connection along some of the key roads in the city. Most of the major north-south arterials through the city currently do not provide such north-south connectivity. For example, Fairwind Boulevard will by pass the central area of the city and connect West Sandwich Road to Sheridan Road, on the west side of the city (See Figure 17). This major north-south roadway would also provide a more direct route to the Sandwich Fairgrounds and provide an additional route for traffic coming from southwest of the city to move to the city's north side without impacting its central area.

Major improvements that would provide through north-south connections are the Duvick Road extension that would intersect East Sandwich Road to the north and Milllington Road to the south and the Latham Street extension which would continue south from the intersection of Church Street and Latham Street to County Line Road.

Additional new north-south road connections include a new link between Cook Road and Sandy Bluff Road, and an extension of Main Street to the north of the city to Chicago Road. Part of this Main Street extension up to Coy Road is planned for the near future in conjunction with the planned new residential areas. The part of Main Street north of Coy Road is planned for a longer term future when growth around Sandwich moves further north from Coy Road to Chicago Road.

b. East-West Routes

To facilitate more convenient east-west traffic movement through the planned areas north of the city, the Land Use Plan calls for a new roadway paralleling Coy Road on its south side, with an extension west to Somonauk Road (see Figure 17). On its east side, this new roadway would move southeast to connect to Little Rock Road. Between this new roadway and Pratt Road, the Plan proposes another east-west roadway that serves the breadth of the new residential areas.

South of the city, County Line Road is proposed to extend east of Main Street and Sandy Bluff Road to the northeast to intersect with Little Rock Road. Similarly, Rogers Road is planned for an extension to the west to intersect Fairwind Boulevard. The limit of the planned area to the south of the city is bounded by another proposed road that would intersect with Sheridan Road to the southwest and Sandy Bluff Road to the northeast.

4. Neighborhoods and Internal Streets Network

The concept behind the proposed street network is the neighborhood (see Figure 19). In effect, the neighborhood determines the street system for the areas planned for growth around the City. Each of the neighborhoods would allow people to reach a civic facility like a park on foot within a convenient walking distance of about a quarter of a mile. These neighborhoods would also allow easy vehicular circulation between and through adjoining neighborhoods because of the frontage roads and street stubs (Figure 19). By introducing landscape buffers between the highway and the frontage road, more private residential areas can be developed. The buffers can also be used as open spaces for active or passive recreation.

5. Natural Open Drainage System

In addition to the design of streets, another element of the Plan pertains to the existing natural drainage in and around Sandwich. As much as possible, the land use patterns and streets are laid out to minimize adverse impacts on the natural overland drains. At the local, project level, as subdivisions are built in the future, other smaller natural drainage areas could be integrated into the stormwater system. As much as possible and subject to the subdivision ordinances and the City's engineering practices, the goal should be to retain the natural drainage patterns that exist today in order to minimize adverse environmental impacts in the future.

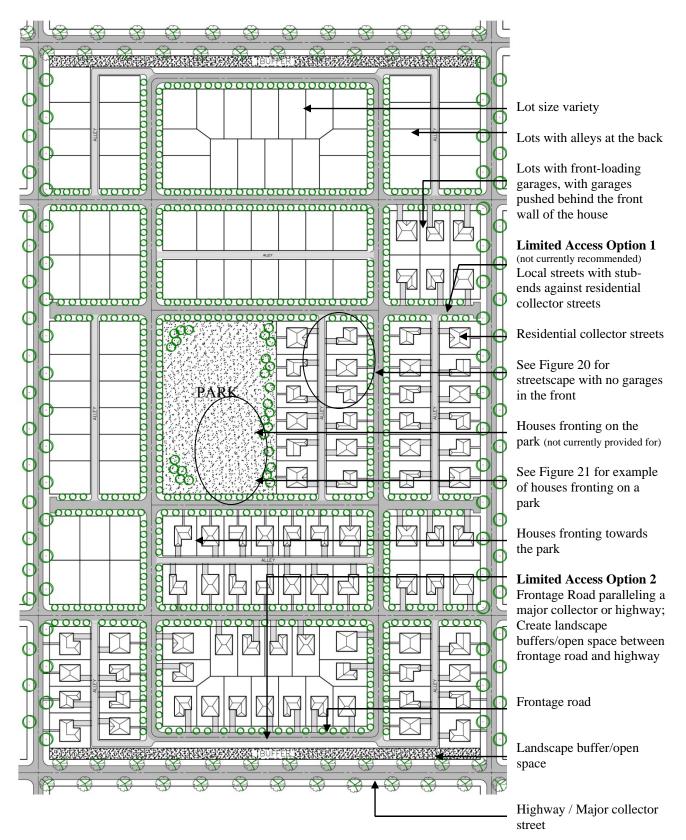


Figure 19: Illustrative Plan for a Neighborhood



Figure 20: Streetscape with no garages in the front (Excepting substandard yards)



Figure 21: Illustrative example of houses fronting on a park (Not currently provided for)

B. POPULATION GROWTH TRENDS AND FUTURE POPULATION

Estimates of the future population for Sandwich were based on an assumed future household size of 2.63 persons and multiplying it by the number of housing units that could be accommodated in the Sandwich Land Use Plan. The future household (HH) size of 2.63 persons was based on the 2000 U.S. Census.

For comparison, from 1990 to 2000, the average household size for DeKalb County reduced significantly as compared to the decade of 1980 to 1990.

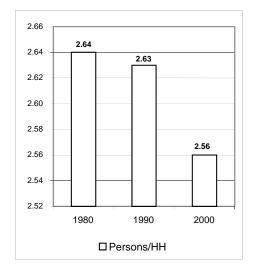


Figure 22: Average Household Size: DeKalb County

For the purpose of estimating the number of future housing units, the residential acres, as per the Land Use Plan, were multiplied by an average gross density of 2.5 housing units per acre for low density residential and 4 housing units per acre for medium density residential. Table 1 shows the estimated future population for Sandwich, based on the above assumptions and planned residential acres.

Planned	Assumed	Estimated	Assumed Future	Estimated
Residential	Average Gross	Future	Household Size	Future
(Acres)	Density	Housing	(People per Unit)	Population
	(Units per Acre)	(Units)		(People)
6,900	2.5	17,250	2.63	45,370
552	4	2,208	2.63	5,810
Year 2000 Pop	6,509			
Total Future Po	57,689			

 Table 1: Estimated Future Population as per Land Use Plan

Source: U.S. Census Data, and 2003 Sandwich Future Land Use Plan

As shown in Table 2, the Land Use Plan at its full build-out represents over a seven-fold increase from the city's 2000 population. Compared to the past growth trends over the last three decades, the future growth for Sandwich, as per the Plan, represents a significant point of departure. While it is difficult to project exactly how much growth would occur in Sandwich, the Land Use Plan provides the City with a blueprint to plan ahead if the City should start attracting significant growth. Thus, the Plan provides the opportunity for Sandwich to be proactive and guide future development for many decades to come.

Tuble 2. Topulation Growin Trends and Tutale Topulation as per Land Ose Than							
	1970	1980	1990	2000	Future Population with Plan		
Population	5,046	5,241	5,567	6,509	57,689		
Change/Decade		195	326	942			
% Change/Decade		4%	6%	17%			
Change in 3 Decades				1,463			
% Change in 3 Decades				29%			
Growth from 2000					51,180		
% Growth from 2000					786%		

Table 2: Population Growth Trends and Future Population as per Land Use Plan

Source: U.S. Census Data, and 2003 Sandwich Future Land Use Plan

C. AGRICULTURAL PRESERVATION AND LAND RESERVES

In keeping with DeKalb County's goal to discourage leap-frog growth in the County – that is, encouraging future growth to occur contiguous to the existing communities -- the City of Sandwich supported the adoption of the Plan for maximum possible future growth.

Currently, all DeKalb communities combined make up 20,470 acres of incorporated area. Majority of this land within the boundaries of the communities is urbanized. With the future expansion of Sandwich and all other DeKalb communities as per their land use plans, the total urbanized land in the County will increase over three-fold to approximately 69,102 acres in the future. However, even with such extensive urbanization, a large majority of the county will remain rural in the future. The county has a total of 405,760 acres within its boundaries. With 69,102 urbanized acres, 338,658 acres - or 83% - of the county land will still be available for farming in the future.

D. COMMUNITY DESIGN & DESIGN PRINCIPLES

Along with the Land Use Plan, Community Design is the other main focus of this report. The way we plan and build our communities makes them more distinct, attractive, and functional. A well-planned community that is also designed well can help create a sense of community spirit in its residents. Such a community also becomes more desirable in the marketplace and helps improve a community's economic well-being. Thus, in the final analysis, there is a direct link between how well a community is planned and designed and the economic benefits this can bring to a community in the long run.

The basis of good planning and design are certain key Design Principles that are described in this section of the report. These principles were evaluated by the residents of Sandwich during the Image Preference Survey and then applied by them to develop the visions for the future of the community. As such, the Design Principles described in the following pages directly reflect the Sandwich residents' preferences and dislikes about the built environment. (Please see the section on Image Preference Survey for a more detailed description of the residents' responses.)

Design Principles

Principle One: Build Neighborhoods and Communities for Pedestrians

People and the human scale should be the common denominator in neighborhood design in order to create a positive and comfortable public realm that facilitates easy interaction among neighborhood residents.





Creating a pedestrian friendly environment is important to those in the community who cannot drive.



<u>1. Walking Scale Should Define the Size and Function of a Neighborhood</u>

Residents of Sandwich's neighborhoods should be able to walk to the center of the community or to the center of their neighborhood. Neighborhood residents should not be dependent only upon their automobiles for their daily trips. They should be able to walk from home to school, parks, stores, offices, civic facilities, and, perhaps, in the future, transit opportunities that may exist in Sandwich. A pedestrian neighborhood is defined by walking distances that are comfortable to the average person. For an adult, a five-minute walk (1/4 mile) is deemed to be the optimum walking distance between home and the core of the neighborhood, e.g. a park, square, civic building, or commercial area, and should be the determining dimension for neighborhood size.

2. Human Scale Proportions and Perceptions

The human scale is the relationship between the dimensions of the human body and the size and proportion of the spaces people use. The surface textures, colors, materials, lighting, and the activity patterns of the built environment underscore this relationship

3. Locating Intensity of Uses

Community size is influenced by walking distances, but it need not be limited by them. The highest intensity of use (scale, floor area, density) must occur in the core of the City or its neighborhoods. The highest densities should be found mixed into the core areas and immediately adjacent them. Open spaces, parks, very low density uses, large boulevards, or natural features should be used to separate neighborhoods.

4. A Network of Continuous and Pleasing Walkways

A network of interconnected pedestrian walkways is an essential design feature in a neighborhood. People are generally willing to walk greater distances if they are provided with a continuous and pleasurable experience. Sidewalks and off-street paths must be continuous, safe, and they must be clearly delineated and understandable. The placement of trees, the treatment of building facades and parking, the use of interesting pavement, fences, hedges, and architectural details all contribute to a pleasurable walking experience. Such elements should be encouraged in the design of all new developments in Sandwich.

5. Transit Linkages to Increase Pedestrian Use

The provision of transit services can significantly increase how far pedestrians can move. Transit stops can be important design elements of individual neighborhoods. Sandwich neighborhoods should be designed to accommodate future transit service.

6. Walking and Bicycling

The ability to walk and bicycle to reach different destinations in Sandwich can reduce the consumption of energy and pollution emissions. Walking and bicycling also allow for greater interaction with nature and neighbors, the observation of seasonal and daily changes, and an appreciation of such features as clean air and streets. Facilities and conditions to enable and enrich walking and bicycling in Sandwich should be incorporated into neighborhood development plans.

7. Bicycle Paths

Bicycle paths, although not strictly pedestrian, have a critical role in complementing the pedestrian network. Most streets in Sandwich can accommodate bicycle traffic. However, paths along major highways or the railroad connecting Sandwich to more distant places may be considered in the future

8. Security in the Pedestrian Realm

Sidewalks should be separated from street traffic on adjoining streets. A parkway, the grassy strip between a street and sidewalk, should be planted with trees at regular intervals to increase the sense of security for pedestrians. This should be done in all neighborhoods regardless of the uses or street characteristics. On-street parking should be encouraged to calm traffic and contribute to the sense of security of the pedestrian.

9. Sidewalk Width

The standard width of sidewalks should be increased in areas where an increase in potential users is anticipated.

10. Sidewalk Edges

The sidewalk edges away from the street should be treated as boundaries to help define the pedestrian realm. In residential areas where building setbacks are shallow, the first floor of residences should be elevated two to four feet above the sidewalk grade for the privacy of the inhabitants of the dwellings.

11. Street Lighting and Street Features

Street lighting and other street features, e.g. benches, planters, trash receptacles, etc., can increase the positive experience of walking in Sandwich neighborhoods. Street lighting and street features should complement the pedestrian realm. The use of lighting should vary with the land uses on property adjoining the sidewalk and the amount of pedestrian traffic.

12. Signs

The pedestrian experience and visual appearance of Sandwich can be enhanced by the quality of signs. Signs designed for the pedestrian can be smaller in area but need not be shorter in the amount of information contained on them.

Principle Two: Create a Sense of Community





1. Community Spaces

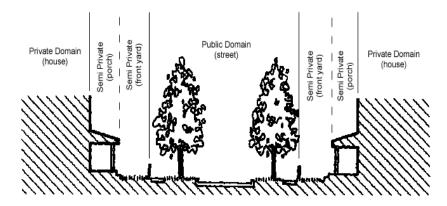
Every neighborhood needs places where people can meet. A sense of community is achieved by the ability of people to meet and interact in common spaces. How well such common spaces are planned and designed helps residents feel pride about their community and enhances their sense of belonging in a community. Community centers, cafes, plazas, parks and even kiosks are places where people can meet and create a sense of community.

2. Facilitate Person-to-Person Interaction

Face-to-face interaction is a fundamental human need. Neighborhoods in Sandwich must be designed with this need in mind. The design of a community space should facilitate easy interaction of residents to help create neighborhood bonds and a sense of community.

3. Semi-Public and Private Spaces

"Good fences make good neighbors." While public life is essential to a community, a sense of privacy is also important. Semi-private areas, such as porches and front yards, help create a transition zone between the public domain of the street and the private domain of the house. (See Figure 23).



Public vs. Private Spaces

Figure 23: Illustration of Public vs. Private Domain along a Residential Street

4. A Mix of Houses and People

A mix of housing types shall be distributed throughout Sandwich neighborhoods. The sense of a safe, healthy and visually appealing community is enhanced by a range of housing types and sizes to accommodate households of all ages and sizes. The location of various housing types within the neighborhood creates physical variation and creates a sense of living in a diverse community. (See Figure 24).



Figure 24: Mixing single-family houses with multi-family houses (Excepting substandard yards)

Principle Three: Respect Natural Environment

Neighborhood development in Sandwich must complement the natural features of the landscape and respect the natural and man-made environment.



Two examples of how to manage streams. The top photograph is inappropriate. By allowing the stream to retain its meander, bottom photo, the stream is more likely to absorb the shock of a flood and create less damage to property.



1. Indigenous Vegetation

As part of the ecological renaissance, indigenous vegetation should be used to the greatest extent possible in the landscaping of new developments in Sandwich. Indigenous vegetation should also be part of any restoration of the landscape in and around Sandwich.

2. Manage Storm Water Responsibly

Storm water collection and management should rely upon pipes and constructed basins and also upon overland drainage and natural landscape features and plants that are intended to convey, store and release storm water flows. The emphasis on infiltration rather than collection of storm water demands a conscientious effort from design to construction to reduce impervious surface, minimize disturbances to soil structure and preserve natural hydrology. The use of certain plants and restoration of landscape features, e.g. wetlands, contributes to more environmentally friendly storm water management; reduces impact on adjoining farmland and waterways, and ultimately lowers operating costs to the City.

3. Manage the Interface Between Agriculture and Neighborhood Development

Agricultural activity around Sandwich is a significant element of the landscape and the local economy. It is also a defining feature of the growth limits of Sandwich. It is important to consider existing agribusiness when developing a property adjacent to farmland. For example, sub-surface and surface drainage should be considered in a manner that considers adjacent agricultural uses. The sub-surface drain tiles should be located and considered with the development in a manner that retains the integrity of the off-site watershed area.

4. Develop Land According to its Suitability

Development should be encouraged on land most suitable for development and be reasonably developed to the degree that will attempt to minimize negative environmental impact.

Principle Four: Provide Open Space of All Types

Open spaces of all types and sizes for visual and aesthetic qualities, recreational, ecological, agricultural and economic functions should be provided within, as well as on the periphery of, neighborhoods and the City.

1. Rear Yards

Private open spaces are essential to the basic function of any household. A modest, yet private, landscaped rear yard is a necessary requirement for most housing types in Sandwich. Residential yards may be defined by a hedge or fence to add privacy. Yard sizes and layout will vary with housing types. Lots with small yards should be compensated by locating them in close proximity to parks.



2. Front Yards

The space between the public sidewalk and the front of the dwelling is a transition space. Even the smallest front yard acts as a transition between the public street and the private dwelling. The front yard is a semi-public space and contributes to the neighborhood's open space network.

3. Public Open Space

Public open spaces within Sandwich neighborhoods can be used for formal and informal gatherings, active and passive recreation, and are essential elements of the neighborhood design. Public open spaces should take on many forms and functions. They must serve all age groups and be integrated with the pedestrian network in the City. Public open spaces must be physically accessible and visible to the public. (See Figure 25)

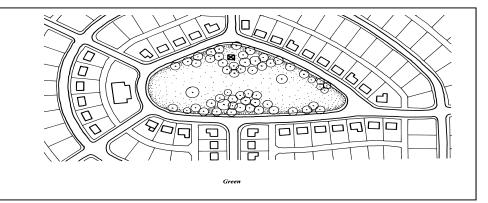


Figure 25: Community Open Space or Green

4. Active and Passive Recreation

Public open spaces in Sandwich must include opportunities for passive and active recreation. Active recreation facilities should be sized commensurate with the expected population within the service area of the public open space. (See Figure 26)

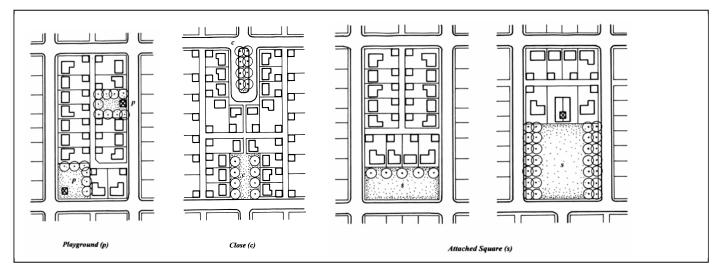


Figure 26: Locations, Types and Functions of Open Space





5. Peripheral Spaces

Peripheral open spaces should define the edge of Sandwich or, individual neighborhoods. Peripheral open spaces enhance the sense of place by making Sandwich identifiable in the landscape: they create a sense of exit and entry. Open spaces on the periphery of Sandwich can preserve environmentally sensitive lands and land used for agriculture.

6. The Parkway (Tree Bank)

Parkways, the space between the sidewalk and the street, can be thought of as part of the City's open space system. Parkways extend internal and peripheral open spaces into the network of streets. Parkways serve to separate the sidewalks from the roadways and vary in width depending upon the street type and the intensity of adjacent uses.

Principle Five: Provide a Community Focus

Sandwich should have a central core or focus. To the extent possible, neighborhoods in Sandwich should also have a core for neighborhood focus.







1. The Core

The Core is the focal point of a community and each neighborhood. The size of the Core will vary with the size of the community and the number of dwellings in a neighborhood. The elements found in the Core of one neighborhood may vary from those found in another neighborhood. The Core may contain commercial, residential or civic buildings, and public open space of some type or function.

The Core should serve as a community's activity center that helps unify the community. Its character often becomes the image of the community. The Core provides potential places for employment, shopping and social activities, and is the place for people in the neighborhood or community to interact or congregate. Pedestrian presence is critical; it signals the vitality of the community or neighborhood.

The Core requires:

- A central and integrated location for equal access by foot, car or transit
- A balance of residential and non-residential uses, especially in neighborhoods
- Retail uses in proportion and scale to housing
- Employment space in proportion and scale to housing
- Civic and social facilities
- Specific design standards for streetscapes and facades
- Vertical design elements, such as steeples, cupolas, clock or bell towers, that render the Core immediately identifiable in the landscape



2. Location

The Core should be designed to provide a central place such as a square, green, plaza, or a crossroad. The Core symbolizes the center of the community or neighborhood and, to the extent possible, is surrounded by the community or neighborhood. The Core must front onto a street or streets within the primary movement network. Where possible, buildings in the Core should define the space or spaces. The size of the Core must be in direct proportion to the number of dwellings in the community or neighborhood. A neighborhood will have a smaller core than a community (See Figure 27).



Figure 27: Illustrative example of a Neighborhood Core

3. Balance

The Core must have an appropriate balance of housing to other uses such as retail and services, civic and social, offices and open space. The amount of retail space should be compatible with the number of housing units and potential users within the primary walking area. Civic and social spaces such as churches, libraries, post offices, community buildings and schools are appropriate uses in the Core since these uses tend to be major focal points for community and neighborhood activity.

4. Design

In order to foster and enhance the purpose and function of the Core, essential design elements need to be included in the design and location of the Core. The Core should have buildings of a greater scale and at a higher density than the remainder of the neighborhood. Buildings in the Core should range from two- to four-stories in height but not greater than 40 feet. Generally, one-story buildings should be avoided. Buildings in the Core must be closely spaced and the street level reserved for personal services and retail businesses. Mixed-use buildings with retail on the ground floor and offices or living units on the upper floors are the preferred building type for the Core, provided suitable accessory facilities are provided.

Parking may be located in the rear of buildings. Landscaped parking lots should be provided.



When retail uses are located in the Core, retail must front onto a street providing pedestrian and vehicular access. Retail requires a seamless or continuous frontage of shop windows and entrances to maintain pedestrian interest.

The Core should have a traditional Main Street appearance with architectural details such as large display windows, awnings, decorative street features, small projecting signs, transoms, and cornices. The Core should have a high point; it should be visible from a distance. This vertical landmark, such as a steeple, cupola, or bell tower, will serve as that focal point and should also form the visual termination of a street or the square at which the Core is located.



Principle Six: Make Streets for Vehicles & People

Streets create the form and scale of the community and must accommodate the pedestrian and the motor vehicle.



A seamless, interconnected network of streets, alleys and sidewalks.

1. Streets Should Create a Positive Community Image

social interaction and cultivate civic and neighborhood bonds.

The first impression we form about a community or a neighborhood is influenced greatly by the street, the streetscape and the uses along the street. Streets are the foundation of the settlement pattern of a community and their thoughtful design is crucial to the creation of a positive community image.

2. Streets Should Form a Network

A network of interconnecting streets facilitates convenient vehicular and pedestrian circulation; provides a clear sense of knowing where you are going, and it more evenly distributes traffic. Every street in a network should be connected to at least two other streets. Such interconnecting



A dysfunctional, discontinuous and confusing road system.



UNACCEPTABLE STREETSCAPE Street frontage dominated by garages provides a hostile pedestrian environment.



ACCEPTABLE STREETSCAPE Removing garages from front of house and adding porches and other details to buildings provides a more inviting pedestrian environment.

streets provide multiple alternative routes to destinations, minimizing traffic congestion along major arterial streets. Figure 17 depicts the required street network for future development.

3. A Hierarchy of Streets Should be Established

The street network relies upon a hierarchy of streets. A variety of street widths should be provided to accommodate various levels of traffic.

4. Alleys

The use of alleys in Sandwich is encouraged to improve the visual appearance of the streetscape and to provide access to off-street parking.



4. Design Features

In order to provide a positive experience, streets in Sandwich should incorporate the following:

- Except for high volume streets, the width of streets should be proportionate to their use
- Buildings should be oriented to face the street, unless other circumstances prevail and make this design feature less desirable
- Off-street and on-street parking should be designed to increase safety for pedestrians on the sidewalks and to calm traffic
- Street trees should be planted in the parkways in accordance with City regulations

Principle Seven: Design Variety within Conformity

Variations within design conformity create the most visually attractive neighborhoods and communities.

1. Variety and Variation should be used in Neighborhoods

Variations on basic patterns are necessary to discourage sameness and dullness. As much as possible, individuality of each building may exist within a common design in the neighborhood. There should be differences in the building form, mass, façade treatment and details.

Variation and variety can be achieved by applying any combination or all of these techniques:

- Lot Width: Lot widths of different sizes encourage variation among building masses. Lots of different widths should be dispersed; lot sizes may generally increase from the center of the community to its edges.
- <u>Lot Depth:</u> Varying lot depth will affect the configuration of the block and the street network.

<u>Blocks:</u> A variety of block lengths and configurations is recommended in Sandwich neighborhoods.

- <u>Alleys</u>: Alleys would be considered for all land uses.
 - <u>Building Lines:</u> A building line defines the proportions of the street by prescribing where a building must be located. Unlike a setback line which sets the minimum distance which may be exceeded by the location of a building, a build-to line sets a mandatory line where a building must be placed, relative to the street. However, certain building projections may be permitted to encroach beyond the building line to provide interest and rhythm to a streetscape as provided for in City ordinances.
 - <u>Build-up Lines</u>: Variety can be accomplished with building height, with taller buildings placed at points of interest and at corners. Roof lines and ridges can also vary with some ridges being perpendicular to the street and others parallel. The addition of porches, roof projections, chimneys, and garage placement also contribute to variety. A build-up line specifies a cornice height that in turn defines the height of the "street wall." Varying build-up lines should be permitted to create streetscapes with different size and proportions. A build-up line is also a mandatory height up to which buildings must be built.



An example of a Build-to line. Notice how front wall of houses remains in-line while the street



An example of a Build-up line. Notice how eave line is same on both buildings and how change in roof orientation to the street reduces the mass and scale of the building on the right.



Unacceptable



Acceptable

- <u>Non-residential Uses</u>: Variety and variation can be accomplished by introducing non-residential uses in residential neighborhoods. The development of the Core also adds to the variety and variation of a neighborhood or community.
- <u>Housing Types</u>: A variety of housing types within a neighborhood, a block, or along a street frontage may be permitted. Multi-family and single-family attached buildings may be dispersed throughout the neighborhoods. The multi-family projects are not encouraged to be concentrated at one location or be of a large-scale.

Principle Eight: Mix Land and Building Uses

A mix of land uses, housing, jobs and incomes creates a more balanced community, reduces traffic congestion and maintenance costs, and creates better fiscal balance for a community.



Acceptable



Unacceptable

1. Mixed and Multiple Uses

Mixed and multiple uses may be permitted in Sandwich neighborhoods. A mixture of compatible uses provides greater proximity for residents to shopping and employment and allows for interaction among neighborhood residents. Mixed- and multiple uses might be located in or very near the neighborhood core. Mixed-use refers to different uses located in the same building. Multiple-use refers to different uses located adjacent each other, typically in separate buildings.

2. Housing Above Retail

While housing above shop fronts may be allowed in core areas, individual proposals for this use in either new development areas or within established retail areas, should be evaluated on a case-by-case basis in consideration of the context of surrounding structures.

3. Housing Mix

A mix of housing types and price ranges should be provided throughout the neighborhood to help achieve the desired visual quality and market, economic and social mix. Housing is not static. Small houses can grow in to larger ones; garages can be added-on or expanded. Add-on opportunities in residential neighborhoods contribute to the variety, diversity and resilience of neighborhoods.

4. Attainable Housing

Neighborhoods should accommodate attainable housing for families of low and moderate incomes. Attainable housing must not be concentrated in one project, one area, or one neighborhood. As much as possible, it should be dispersed throughout the community.

5. Land Use Boundaries

Land use boundaries usually run down the middle of the street. Both sides of most streets should have matching land uses in order to create more harmonious streetscapes. Schools, parks and other civic buildings and uses would be exceptions to this rule.

6. Large Floor Area Uses

Large single purpose uses such as warehouse supermarkets, home improvement centers and discount department stores, should be located on the edges of neighborhoods along arterial highways or in industrial areas.

Principle Nine: Maintain Quality

Sandwich is committed to maintaining its character and quality of place and the character and quality of place within its individual neighborhoods.



1. Property Maintenance Codes

The level of property maintenance will influence property values throughout the neighborhood. Thus, prevention of visible deterioration of any property in Sandwich neighborhoods is imperative. Enforcement programs should be constant, consistent and equitable.

2. Preservation of Sandwich's Heritage

Historic structures, neighborhoods and landscapes should be preserved and enhanced. Historic preservation contributes to the richness, diversity and visual interest of Sandwich's neighborhoods and help to differentiate neighborhoods from one another. Historic preservation efforts are compatible with neighborhood development and should be encouraged.

3. Maintaining a Sense of Security

A fundamental human need is security. People must feel secure in their community. The greatest security is in knowing the people who live and work in the community. Neighborhood design and layout must promote personal interaction and neighborliness while assuring privacy.

XIII. IMPLEMENTATION

The majority of the Sandwich Plan would be implemented by individual developers and builders. The City would need to adopt specific annexation policies to achieve integration of different projects and the other objectives of the Plan. The Plan is not a static document and will provide flexibility to the City to accommodate changes in development trends. Some changes to the Plan will be necessary over time, which should be made part of a formal update of the Plan, after deliberations by the City Council including comments from the citizens at a public hearing.

In addition to the annexation policies, the City would need to focus on adopting a detailed downtown revitalization strategy. Such a strategy would identify the areas of the downtown the City might consider appropriate for change in the future. It would need to include the financing mechanisms necessary to initiate new development with possible financial and other incentives. Moreover, such a strategy should include the key urban design concepts and principles to be followed by developers to ensure physical development of the downtown that meets the revitalization goals.

Finally, the implementation of the Plan will possibly require changes to some of the existing zoning and/or subdivision regulations of the City. A detailed evaluation would first be necessary to identify the extent of changes required. In considering which new regulations should supercede the existing regulations, the City has the opportunity to adopt a new Unified Development Ordinance (UDO). A majority of the work for the UDO has already been completed by a specially appointed Regional Planning Commission. This Commission is made up of the representatives from the DeKalb communities. These Commission members have worked closely with the County and LVI to help draft the UDO. Sandwich could take advantage of the work already done on the UDO and modify the UDO, as necessary, for its specific needs to more effectively implement the Plan. Alternately, the City could choose to modify only parts of its current regulations to be in conformance with the design guidelines described in this report. To the extent the underlying regulations – whether adopted as part of a UDO or modifications to the existing regulations – support the design principles, the City would effectively implement its Comprehensive Plan over the years to come.

XIV. CONCLUSION

The Land Use Plan adopted for Sandwich is based on the land development strategies that were derived from the citizens' plans, goals and objectives. Through the charrette process, LVI made sure at the beginning of the plan process that the citizens of Sandwich would have a direct say in what was adopted in their Plan. As such, the Sandwich Plan delineates specific distribution of land uses and the layout of neighborhoods and streets to meet the citizens' goal and objectives for the future of their community.

To effectively implement the Plan and create a community that corresponds to the citizen's visions, the City of Sandwich might need to adopt new regulations. The Plan and its adoption thus represent the first important steps that are crucial for a sound development of the community in the future.

In conclusion, adopting a Land Use Plan represents the first step towards the actual implementation of the concepts described in the Plan. The City would need to make sure the Plan is implemented successfully. The market conditions in and around Sandwich, and in DeKalb County, would affect future growth of Sandwich. However, what shape the future growth takes will depend on an effective implementation of the Sandwich Comprehensive Plan.

Appendix "A"

ATTITUDE AND PREFERENCE QUESTIONNAIRE RESPONSE

The Attitude and Preference Questionnaire was administered concurrently with Image Preference Survey to thirty-one participants on November 7, 2002. Participants were asked to answer questions intended to gauge community attitudes and preferences for quality of life considerations, items that enhanced or detracted from positive images within Sandwich, and future priorities for development in Sandwich. The average age of the group was 55 years old and their average length of residency in Sandwich was 32 years.

The key findings from the Attitude and Preference Survey include:

- 97% of the respondents believe that community opinion is important for determining the future visual appearance and character of Sandwich.
- According to survey respondents the priorities for new land use or development within Sandwich included single family homes (17%), more industry (17%), bike paths and trails (13%), and more stores and services (13%).
- When asked to identify what characteristics or qualities set Sandwich apart from other communities in the county, residents responded that rural setting (22%), quality of life (22%), other uses (18%) and small, compact physical area (11%) were the key attributes.
- 80% of the respondents agreed that downtown Sandwich should be an area where people can walk along streets lined with shop windows, trees and outdoor seating areas.
- 84% of the participants agreed that Sandwich should control the location and design character of all new and rehabilitated buildings in the City.
- Ninety-seven percent agreed that landscaping and street trees are essential to the desirability of a neighborhood.
- 55% of the respondents agreed that a good neighborhood includes a mixture of housing types, shops, open space, churches, civic institutions, and places to work, transit stops and public gathering places within a short walking or biking distance from home.
- 94% of survey respondents agreed that sidewalks are necessary improvement and should always provide a safe and pleasant walking experience.
- Residents were asked if Sandwich had changed in the past few years. Over half the respondents (58%) answered that Sandwich has continued to be the type of community in which they wanted to live. Twenty-one percent (21%) said that the community has changed and is less of the community, in which they wanted to live. Twenty-one percent (21%) responded that the community hasn't changed much.
- Residents were asked with the increasing population and the need to provide for economic development where should the development occur. The four most popular answers were:

- 1. Keep development away from natural areas, concentrating development in appropriate locations (29%)
- 2. Concentrate all new commercial development along US 34 (15%)
- 3. Develop single use neighborhoods, keeping similar uses together and separating different residential types from one another and other land uses from one another (15%), and,
- 4. Discourage development in order to protect the farmland that surrounds the City (12%)
- Residents were asked what they wanted to see occur in Sandwich in ten, twenty or thirty years hence. Twenty-one traits or characteristics were provided and respondents were asked to rate each trait with respect to its level of importance to the respondent. Among all respondents, the ten most important traits or characteristics desired in Sandwich include:
 - 1. Neighborhood schools and the entire public school system are key community assets
 - 2. A viable central business district with pedestrian friendly streets, storefronts along the sidewalk
 - 3. A small town atmosphere
 - 4. Well-maintained homes and yards
 - 5. Citizen participation in all levels of community decision-making
 - 6. Well designed and landscaped developments
 - 7. Well-designed public buildings and projects
 - 8. Tree-lined streets
 - 9. Road network is easy to understand and consists of an interconnected system of streets that is attractive and functional, and safe for pedestrians, bicyclists, and motorists
 - 10. The design of housing, commercial and industrial developments is in keeping with the character of the City

Appendix 'B'

2003 Sandwich Future Land Use Plan LAND USE CLASSIFICATIONS

(Sequence of classifications corresponds to the Legend on the Future Land Use Plan Map – Figure 17.)

Open Space (and Parks): This land use designates the preferred locations for public parks and private open spaces for active and passive recreation. This land use applies to formal public squares, facilities for programmed recreational activities, and linear trails along major thoroughfares and drainage ways.

Agriculture: This designation applies to all land within the mile-and-a-half planning jurisdiction of Sandwich that is used for agricultural purposes. The City values farming, agribusiness and the livelihoods represented by the farmland surrounding the community.

Environmental Corridor: This land use designation allows for preservation of natural drainage and environmentally sensitive areas as open space. To the extent feasible, the natural drainage areas should be integrated as Environmental Corridors within a new development to maintain the natural drainage patterns.

Civic and Institutional: This land use classification designates locations for civic and institutional uses, including government facilities, churches, schools, libraries, day care, post offices, police and fire stations and sub-stations, and community buildings.

Land Reserve: Land beyond the conventional mile-and-a-half planning boundary of the City of Sandwich that the City wants to reserve for long-range planning. The City would exercise its power to control the land uses proposed for the reserve areas.

Flood Plain: The land use classification designates the land areas typically adjacent to body of water with ground surface elevation at or below the base flood of the 100-year frequency flood elevation including detached special flood hazard areas, ponding areas, etc. The floodplain is also known as the special flood hazard area.

Low Density Residential: This land use classification designates the preferred areas suitable for suburban residential development at an average density of 2.5 dwelling units per gross acre of development area. The layout of low density residential projects, and the scale and design of residential buildings, will be determined by the detailed land development standards and building regulations adopted by the community.

Medium Density Residential: This land use classification designates selected areas for residential development at an average density of 4.0 dwelling units per gross acre of development area. The City will allow medium density residential development to occur at dispersed locations across the City. The location and layout of the medium density residential projects, and the scale and design of residential buildings, will be determined by the detailed land development standards and building regulations adopted by the community

Commercial: This land use designates the preferred locations for retail, food service, personal and business services, offices, and automotive related uses. Mixed-use buildings, i.e. buildings having retail or food services or offices on the ground floor and offices or residential on upper floors, are an option in the areas designated for commercial land use.

Downtown Retail: This land use designation applies to the existing downtown areas along U.S. Route 34, Main Street, and Railroad Street. The distinction between this land use and the commercial land use is the Downtown Retail also provides a central location for civic functions (City Hall, post office, and library) and is the traditional core area of the community.

Industrial: This land use classification designates the areas suitable for industrial uses, including manufacturing, assembly and warehousing operations. The land classified as Industrial may also be used for locating office buildings. The office buildings may or may not be incidental to the industrial operations.