L'Anse Village Master Plan

2017

2020 Vision
…and beyond

L'Anse Village Planning Commission
The Citizens of L'Anse

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Chapter 1: Plan Introduction

Purpose of the Plan

Most people individually or collectively plan for their future, dealing with issues from the simple and immediate (what to have for dinner tonight) to the complex and long-term (how to manage money for their retirement while paying for their child's education). Corporations find it essential to plan for efficient delivery of their product or service, taking into account all the inputs, processes, constraints, and requirements to achieve customer satisfaction.

A local unit of government engages in planning to assist in decision-making while anticipating and responding to change. This plan was undertaken to help the citizens of the Village of L'Anse set priorities and goals to achieve a sustainable future. The plan contains future land use recommendations and an action plan for utilizing limited resources for maximum potential. This plan serves as a guide for community and regional coordination on future decisions about growth management, economic development, land use regulation, and infrastructure spending. This plan also lays a solid legal foundation for implementation tools such as zoning.

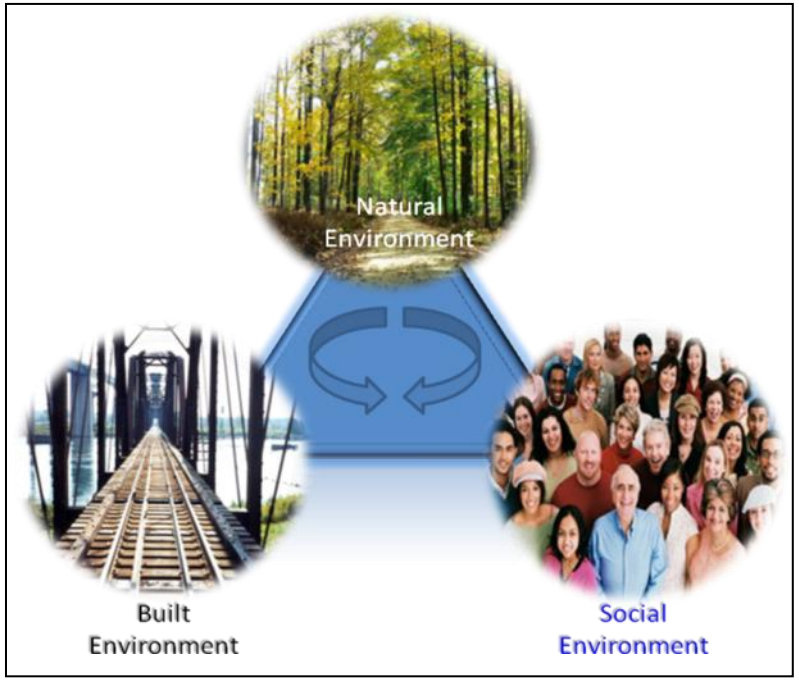


Figure 1-1: Plan context, understanding conditions and relationships

The Michigan Planning Enabling Act states that the purpose of the Master Plan is to guide and accomplish development that satisfies all of the following criteria:

1. Is coordinated, adjusted, harmonious, efficient, and economical
2. Considers the character of the planning jurisdiction and its suitability for particular uses, judged in terms of such factors as trends in land and population development
3. Best promotes public health, safety, morals, order, convenience, prosperity, and general welfare

The Master Plan is also meant to promote or adequately provide for the following:

1. A system of transportation to lessen congestion on streets
2. Safety from fire and other dangers
3. Light and air
4. Healthful and convenient distribution of population
5. Good civic design and arrangement, and wise and efficient expenditure of public funds
6. Public utilities and improvements such as sewage disposal and water supply
7. Recreation
8. The use of resources in accordance with their character and adaptability

To this end, master plans address issues relating to land use and infrastructure projecting 20 years or more into the future. Land use plans classify and allocate land for such uses as agriculture, residences, commerce, industry, recreation, public buildings, schools, and natural resource utilization or conservation, etc. To do this, it is important to understand existing conditions and relationships between the natural environment (soils, wetlands, topography, forests, waterways, open spaces), built environment (transportation infrastructure, housing, waste and water supply systems, public utilities), and social environment (population, employment, activity centers, governance, sources of wealth).

However, community planning is not simply a technical, academic process that turns data inputs into obvious recommendations. A Master Plan is a living document that rests upon the foundation of community vision—what the people of a community envision for their collective future. This master plan incorporates significant regional input which aided in the creation of appropriate goals and strategies that are consistent with a regional identity. Today, as resources are thinly stretched, it is also important to look for beneficial collaborations with neighboring communities, and adopt an attitude of support for initiatives that benefit the greater region as a whole, therefore benefitting the Village in the process. This plan is created from a perspective of collaboration and cooperation with the municipalities that surround the Village of L'Anse and the County as a whole.

Master Plans also establish a framework for zoning and other public policies which serve to enforce the community vision. Community goals relating to growth, economic development, recreation, environment, education, historic preservation, and water resource management provide criteria by which to evaluate recommendations. All viable communities meet some minimum level of public service provision; however, the most desirable communities implement policies that are true to their collective vision and that convey a strong sense of identity and pride of place, stimulating private investment through attention to a sustainable future.

The Planning Process

This Plan is an update of the 2011 Master Plan. The Planning Commission determined that while much of the information in the Plan about the Village and area was relevant and that conditions are mostly unchanged, an update and major edit was needed.

The Master Plan update is prepared under authority of the Michigan Planning Enabling Act, P.A. 33 of 2008. It is not a regulatory document, but a policy plan which serves as a foundation upon which the Village will adopt regulations to implement the recommendations of the Plan. This plan provides the basis for zoning under the Michigan Zoning Enabling Act.

The master plan is also the basis for subdivision regulations, local land use regulations, and the capital improvements plan. This helps to ensure that these regulations are consistent with the community goals and policies expressed in the master plan.

The plan should also be consistent with other area plans. To this end, elements of the following documents have been incorporated into this Master Plan:

- Village of L'Anse community survey, 2011
- Baraga County Strategic Plan 2000/2001
- Fourth Baraga County Attitude Survey (Feb. 16, 2005)
- Village of L'Anse Downtown Development Plan
- New Page Forest Management Plan for the Village of L'Anse Pinery Lakes Properties
- Village of L'Anse/Township of L'Anse and L'Anse Area School Recreation Plan 2003
- Village of L'Anse/Township of L'Anse and L'Anse Area School Recreation Plan 2008 - 2012
- Baraga County Recreation Plan 2006 – 2010
- Target Market Analysis, Baraga County, 2016
- Go Baraga County Strategic Plan, 2014

Use of the Master Plan

The Village of L'Anse Master Plan will be utilized in the administration of the Village in the following ways:

1. *Advisory Guidelines for Development:* The visioning section of the master plan serves to document public interests and to declare public intentions, allowing private sector landowners and developers to make decisions that are consistent with public goals.

2. *Foundation for Implementation:* The Master Plan provides a rational, foresighted, comprehensive, long-term oriented foundation for zoning, rezoning requests, subdivision and land division regulations, special initiatives, and the capital improvement program.
3. *Coordinated Planning:* Provides the mechanism by which to coordinate and communicate with neighboring jurisdictions based on common conditions, goals, vision, and interests.

Next Steps

Implementation of the plan is an ongoing process, requiring continuous monitoring of changing conditions and progress toward achieving plan goals and strategies. At the very least, the plan shall be reviewed every 5 years after adoption, and the review findings shall be recorded in the meeting minutes. In addition, after adoption of a Master Plan, the Planning Commission shall prepare a capital improvements program of public structures and improvements that will be needed or desired and can be undertaken within the ensuing six year period. These will be arranged in order of priority. See the Implementation Plan of Chapter 6 for more details.

Executive Summary

The Village of L'Anse is a picturesque community that benefits from a "Superior" location on the shores of beautiful Keweenaw Bay (Lake Superior). The Village offers a balance of amenities and opportunities. The traditional residential neighborhoods are within walking distance of essential products and services and offer a safe, warm feeling of community. The historic Downtown is full of vibrant shops and restaurants, and even a large grocery store and hardware store. The Downtown area also contains a marina, Waterfront Park, civic organizations, waterfront pedestrian trails, and central government offices for the County, Village, and Township. The area school is located close to the neighborhoods and just up the hill from the government facilities and Downtown. The Falls River, which flows through the Village, provides secluded nature trails and fishing opportunities for Village residents. Downtown banks even have walk-through service windows in addition to drive-thru service windows. All this creates a safe and welcoming environment for people who value living near where they work and play and who don't want to rely on automobile transportation. Residents do not have to drive to survive in L'Anse.

There is rail service into the community and the potential for a deep water port. CertainTeed Corporation provides employment near Downtown, and the Village has available space in business and industrial parks along the highway corridor. The L'Anse Warden Electric plant provides leadership for a green economy cluster. There is opportunity for spectacular residential or mixed-use development with a

view of Keweenaw Bay adjacent to the Waterfront Park in Downtown. High quality medical and health services are available within the community. L'Anse is only 30 minutes from the Houghton/Hancock area where Michigan Technological University offers quality educational opportunities with a scientific, technical, and engineering focus. This provides a great opportunity for partnerships in commercialization of new technologies. The Keweenaw Bay Ojibwa Community College also offers a range of life-long learning opportunities and Associates Degrees for community enrichment.

The surrounding area offers a variety of natural features for the enjoyment of outdoor enthusiasts. Second Sand Beach Park provides beaches and picnic opportunities in a pine forest setting. Kayakers will be delighted exploring the shores of the unique landform that is home to historic Pequaming while searching for shipwrecks. Boaters and fishermen, or even floatplane pilots, can put in at the L'Anse Marina and walk up to one of several restaurants or coffee shops for refreshments or get supplies at the local outfitter. There are cross-country skiing, mountain biking, snowmobiling, hiking, and nature-watching opportunities in abundance. And the people of L'Anse are friendly and welcoming. Once you fall in love with the area, you may never be able to leave. And why should you? Housing is affordable and life is simple in L'Anse.

The key to a sustainable future in L'Anse starts with **attracting and welcoming new residents, businesses, and industry**. Quality education is key to success in a transitioning economy. Educational efforts need to focus on creating skills that are relevant to future opportunity. This educational infrastructure exists in a quality school system, a unique community college, and nearby world-class institution. However, with decreasing State support, the community must take the future into its hands and continue to **invest in education** to ensure that residents can transition and participate in a new global economy and can contribute to a resilient local economy. L'Anse provides high quality-of-life for companies that can utilize area natural resources or who depend on the internet for commercial success. This fact may not be widely known or recognized, so the community must reach out and network with current or future executives of these kinds of technology-dependent firms. Communities are often built through uniquely **sustainable relationships**, and not by the ability to offer ubiquitous or homogenous financial incentives. In today's competitive and mobile knowledge economy, employees and executives value the quality of a place as an incentive in itself. L'Anse has **high quality of place** now, but can improve on this through targeted strategies meant to build on current strengths. The following paragraphs address priority issues and solutions in more detail with the goal of enhancing sustainability in L'Anse and the surrounding area.

To address population growth, it is important to recognize that population levels in the Upper Peninsula were historically impacted by the cycles of economic prosperity or decline of major industries such as mining and timber production. A more **diverse economy** would create greater sustainability in population and employment levels.

Additionally, L'Anse must address the **aging of its population base**. Rapid growth of the U.S. population age 65 and over will begin in 2011, when the first of the baby-boomer generation reaches age 65, and will continue for many years. This trend has been particularly pronounced in the rural areas of the Upper Peninsula. The aging of the population has impacts on social services, transportation, and housing decisions.

The Village may experience a gradual increase in population as the aging seek to relocate from remote to more urbanized areas into housing which is easier for them to manage. This presumes that affordable and accessible housing is available, along with services for the aging (especially health care). The Village is an ideal location for **retirees** who value a scenic environment and high quality-of-life. Retirees bring an opportunity for increased employment in the health and personal care industries. However, to balance the aging of the population, the County (and Village) needs to focus on increasing the percentage of working population to support the non-working population and ensure a viable economy.

In areas such as L'Anse where deaths have begun to outnumber births, migration is one way to spur growth. However, the Village, along with most other rural areas, has some difficulty **retaining and attracting residents** (especially youth). If this trend continues, it may contribute to the erosion of the tax base, necessitating further tax increases to continue service provision. As shrinking resources are shifted to larger urban areas, rural areas such as L'Anse have difficulty in securing funding and investment. With the aging of the population, less support is given to education of youth as more funding is shifted to services for the aging. This further limits the ability of the area to attract young families. Additionally, an increase in median age does not send a positive signal to businesses that want to locate near young talent.

This trend is not unique to L'Anse. Michigan is falling behind more prosperous Midwest regions like Minneapolis and Chicago in attracting, retaining, and concentrating young professional "knowledge workers" who demographers say are key to regional prosperity in coming years. To change this trend, Michigan and its regions need to work to create places where mobile young talent wants to live.

Although The Upper Peninsula has not been as impacted by a general population exodus as the rest of the State which experienced severe declines in the automotive industry, the Upper Peninsula is suffering from the net loss of school-age children which decreases state aid to school districts and strains program improvements. Some say that Michigan's greatest export is its children, as youth leave to find more opportunity elsewhere. Many youth who grew up in the woods next to the shores of Lake Superior long to return should economic opportunity in the Upper Peninsula improve. Improvement may depend on the conscious effort of communities to reengage and attract this age group, nurture economic opportunity, improve incomes, reverse the rising unemployment trend, and diversify the economy. With **improved and targeted education**, the growing labor force in the Baraga County area becomes a great resource for the future. L'Anse must actively **grow local entrepreneurs** who already value the area quality-of-life and lifestyle. Michigan Tech provides a ready source of

the best and brightest if they can be enticed to stay in the area and pursue or create new opportunity. Life-long quality education is crucial to creating an economy that is built on knowledge and utilization of technology. Vibrant urban areas with **young professional social networks** support and attract young talent.

As previously discussed, population trends in the Upper Peninsula have often mirrored the rise and fall of the various natural resource-based industries that served to attract investment and activity to the area. These industries have included fur trading, mineral extraction, and timber harvesting. When these industries declined due to exhaustion of resources or change in demand, the area experienced significant population decline and disinvestment. Like a phoenix waiting rebirth, Baraga County is poised to rise again, this time within the framework of a more sustainable future. The area currently needs to reinvent itself as being less dependent on the harvesting of natural resources to serve as commodity raw materials in favor of a more diverse local economy that utilizes natural resources to create greater local wealth. Communities should find ways to harness renewable or carefully managed natural resources in **value-added production** opportunities. For example, timber resources could be designed and constructed into energy efficient housing modules (ECHO units) and distributed to serve the needs of aging population.

The internet has made it possible for local businesses to reach a **global marketplace**. Modern information technology and transportation resources have extended market reach and make it possible to ship a product anywhere in the world in a matter of days (hence our international food supply). However, caution is needed in pursuing long-term business opportunities that depend on low cost energy and transportation resources. It is unlikely that our current non-renewable energy resources will continue to be a low cost alternative as supplies tighten and competition increases. Businesses that export small products that are easy and inexpensive to ship may be more sustainable in the remote regions of the Upper Peninsula should fuel costs become prohibitive in the future. To survive in a global marketplace, businesses need to offer a unique product or service, or work from an innovative business model to create a niche. This innovative capacity depends on having talented people with vision and a supportive business environment. It also depends on having high quality communities to attract these talented people. And it depends on having a high quality educational system to create and sustain these talented people.

The Village should participate in regional efforts to **attract talent** from outside the area, and to retain the youth population. The SmartZones at Michigan Tech serve as an incubator for innovation and technology and as a springboard for youth who can capitalize on their education. The L'Anse area can build on these opportunities by supporting spin-off or complimentary businesses. Placing education as a community priority will increase the ability of the L'Anse area to take advantage of a transitioned economy. The L'Anse area should build on its quality school system by increasing the strength of the vocational training program and reaching out to a global student network through appropriate on-line classes. A strong school system will also help to attract young professionals. All these strategies must be supported by the latest in **communications infrastructure and technology**.

The **green economy** is also a hotbed of entrepreneurial activity and above average wages. L'Anse already has a foundation for green jobs upon which it can build for the future, including a renewable energy production cluster and feedstock suppliers. These job opportunities are driven by programs to finance energy retrofits and achieve advanced codes and standards and by replacement jobs for retirees. Opportunities exist at all skill and educational levels, and much of the job training can be accomplished in local public schools, on-the-job training, or special programs. The community should partner with the Keweenaw Bay Indian Community and Michigan Tech to increase offerings of technical classes for green jobs. The L'Anse Warden Electric plant can provide local workforce experience and mentoring opportunities in this field. Incumbent "green" jobs may include farmers, electricians, and power plant operators while new jobs may include wind technicians, sustainability directors, and home energy raters. Middle skill jobs which may be elevated include weatherization technicians, certified building operators, certified building analysts, and envelope specialists.

L'Anse should focus on **growing export industries and businesses** that draw wealth from outside the community (not just serve the needs of the community). The L'Anse area is currently dominated by service industries and manufacturing, although manufacturing has declined. The recently established Superior Suppliers Network works to forge new links to support and grow the existing manufacturing base. Concentrated base industries currently include forestry and logging; machinery manufacturing; fabricated metal product manufacturing; and heavy and civil engineering construction. Industries that are partially base industries (export as in tourism) and partly secondary industries (local goods and services) include accommodation, food service and drinking places. L'Anse can focus on encouraging growth in industries that currently have very low area concentration in comparison to other reference areas. This may keep more wealth close to the community. Based on the aging population demographics and other data, nursing and residential care facilities seem a prime opportunity. Because of the proximity to Michigan Tech and the high quality-of-life in the area, professional and technical services may also be a prime opportunity.

The area needs to ramp up the preparation of **replacement workers** for retiring baby-boomers, based on projected area needs. The Michigan Works Agency can help educators and workforce trainers to determine the gaps and training needs, and then community can look for ways to improve adult education opportunities, either through traditional or online methods. All individuals in the community would benefit from increased utilization and knowledge of computer applications that can increase connections and learning capacity. The area also needs to improve broadband and telecommunications capabilities to support educational and business opportunities.

Communities that have creative and talented people, modern information technology infrastructure, and the foresight to plan for the new economy have greater wealth generation potential through **technology-based economic development**. The proximity of Michigan Technological University gives a boost to this potential in Baraga County and the surrounding municipalities. This is particularly true since Michigan Technological University has created a SmartZone in Houghton/Hancock, which is a technology center designated to promote

resource collaborations between universities, industry, research organizations, government, and other community institutions to create technology-based business and jobs. This SmartZone will focus on injection-molded plastics, precision-machined surgical tools, precision bearings, electronic manufacturing, and robotics.

When enterprises move into the commercialization phase (after being incubated in the SmartZone), jobs are created in communities having the desired infrastructure, labor pool, amenities, quality-of-life and other factors that facilitate the location of high-skilled, high-wage jobs in the **knowledge economy**. This is why it is important for L'Anse to focus on increasing the knowledge and skills of the workforce, updating technology infrastructure, and improving public amenities within the population center. L'Anse can improve standing in the knowledge economy by pursuing opportunities to create information and high technology jobs and management and professional jobs, improve workforce education, create community venture capital groups, increase resident's use of the internet, improve digital government resources, enhance cable modem access, support export markets, and encourage innovation and entrepreneurial activity.

For greater sustainability, the L'Anse area should create unique attractions to serve a regional tourism base focused on Michigan, Wisconsin, and Canadian residents. Future possibilities include sport fishing, eco-tourism, agri-tourism, and cultural/historic tourism. The area provides great opportunity for interpretation of past industries and the Ford history. Opportunities to improve mainstay tourism activities such as camping, hiking, hunting, and mountain biking should be pursued. The Village may also be able to increase tourism by reaching out to appropriate networks in southern states, and offering to provide a welcome relief from the southern heat and humidity.

L'Anse residents are benefitted by an abundance of recreational opportunities. But ongoing planning and regional collaboration is needed to realize the most benefit from recreation expenditures by becoming a **recreation destination**. Because residents of the entire area enjoy recreational facilities, **collaborative efforts** are appropriate and would ensure the most efficient use of fiscal resources. This is also the only way that the area can hope to become a recreation destination – by collaborating and collectively marketing activities and facilities. The Village can best utilize limited resources by creating recreation goals that complement economic and community development goals, and carefully choosing strategies to increase facility utilization and decrease ongoing costs.

The **waterfront** is recognized and valued as one of Village's greatest assets for both residents and visitors. Because of the economic development benefits relating to the waterfront and the important ties to Downtown L'Anse, this area merits priority attention and future enhanced investment. Residents noted there was a need for greater utilization of the lakeshore and beaches.

The creation of a **recreational trail network** is of high priority interest for tourism development and enhanced quality-of-life for residents. Of highest priority is trail development being spearheaded by the KBIC, along the lakeshore, from Aura to Sand Point around the head of Keweenaw Bay. Other opportunities include Falls River hiking and Linden Creek nature/riparian buffer trails. There is an

opportunity to create interpretive gardens which would provide recreational opportunities but also help stabilize the slopes along Linden Creek in the east central portion of the Village. The line of bluffs paralleling the lakeshore in the northwestern corner of the Village would provide outstanding scenic and interpretive recreation opportunities. Opportunities for collaborative trail networks include cross-country ski trails; scenic, interpretive, or fitness-oriented hiking trails along the rivers; snowmobile trails and trail amenities; a designated ORV trail network; boardwalk along the bluffs; wildlife & birdwatching nature trails; mountain bike trails; and an auto-touring route linked to natural and historic features.

Interpretive and wayfinding signs and maps are needed to enhance all recreational opportunities. There is a need to support youth recreation and transportation programs to help single parents. Miscellaneous important recreational opportunities include an outdoor ice rink and sledding hill, roller skating facility (or skate park or roller blade trails). The Village has recently constructed a splash pad in the waterfront park.

It is important to the Village of L'Anse to **build local resilience**, thereby improving the ability of the community to respond to energy, economic, or social shocks. This means enhancing community self-sufficiency and creating a collaborative community framework. Three topics that easily bring people together to practice collaborative efforts toward community resilience are the pursuit of local food systems, local energy production systems, and local businesses.

This plan supports the creation of a **community food system** to enhance food security and support a local food economy. While it is difficult to construct a self-sustaining food system with the challenges of climate and short growing season in the Upper Peninsula, this presents L'Anse with a unique opportunity to create a "northern" model for local food production. For example, there may be potential for the community to partner with the L'Anse Warden Electric Company to see if their heat by-products can be used to sustain community greenhouses, hoop houses, or aquaculture or aquaponics facilities.

Local production opportunities such as community gardens, urban gardens, edible landscaping, and appropriate urban farming will be supported in the community's ordinances, as will local distribution opportunities such as farmer's markets, food stands, and small neighborhood stores. The community will also support initiatives to develop community food processing systems such as community kitchens, food business kitchen incubator facilities, and entrepreneurial urban agriculture projects.

Small scale, either neighborhood or individual wind turbines, as well as solar power, should be considered a viable source of electricity to supplement the traditional sources. It should also be noted that the easiest and most efficient way to pursue **renewable energy sources** is to reduce overall energy consumption. **Energy conservation** is the best and fastest way to increase the energy resilience of the local community.

Making sure that community employment is diversified beyond single, large, and often remotely-owned businesses is a good step toward increasing local resilience. **Strong local businesses** contribute to local sustainability. Local investors, local consumers, local governments, and local entrepreneurs can work together to support local businesses.

The **built environment** provides an opportunity to enhance economic sustainability. Building facades provide a public face for private investment. Well-maintained buildings with pleasing aesthetics illustrate community pride and health, and thus contribute to economic opportunity. Buildings and infrastructure also impact quality-of-life. For example, universal building design and accessibility standards make it possible for people to age-in-place rather than move away from family or friends to go to group facilities. Buildings that are energy efficient contribute to affordability of housing and viability of businesses, and reduce community energy production demands. Historic buildings provide a link to the past and a sense of continuity for successive generations. They create a unique and authentic character that can contribute to economic development and attraction of residents.

The Village of L'Anse has retained many beautiful **historic buildings**, including churches, schools, and civic buildings, that can be better utilized to promote economic opportunity. The Village has recognized the value of improvements and the Downtown Development Authority has made great strides in updating Downtown infrastructure. Similar care is needed to enhance the gateway image and aesthetics of the highway corridor. One of L'Anse's best assets is the **compact development pattern** that supports a walkable and bikable community. Wayfinding signage, parking lot enhancements, sidewalk enhancements, and a regional trail network will help to build on these assets.

Meeting the **housing needs** of residents in different stages of life and circumstances can help to revitalize rural communities and retain residents. One way to do this is by **supporting mixed-use neighborhoods** which combine residential and neighborhood commercial uses in an effort to promote walking and a sense of community. L'Anse already has a tradition of this. Another way is to utilize **accessory dwelling units**. This will improve housing diversity and affordability.

Most housing in the Village of L'Anse was built prior to 1939 and is in need of **energy retrofits**. It is always a challenge to maintain housing conditions in tough economic times, especially with older housing stock. The Village can assist residents to adapt homes to be accessible for the aging or disabled, and pursue funding for home rehabilitation. There may be a need, based on changing demographics, for **senior assisted-living or independent living facilities**. The Village should consider facilitating a cottage community development with small, closely clustered units to serve the need for the elderly to live in smaller homes with support services while aging in place. The old hospital facility may be modified for assisted living use, or could be removed to provide for this kind of housing opportunity to be developed.

The Village is largely built out for residential development, unless redevelopment of underutilized structures occurs. The Village should embrace the waterfront by pursuing **redevelopment opportunities** of obsolete buildings to add prime residential condos or attached housing along the waterfront in the downtown. This would add more vitality and tax base for the downtown.

Most of the housing in the Village of L'Anse is located north of the Highway 41 corridor. **Pedestrian improvements** are needed to enhance neighborhoods south of the highway corridor and on the northern boundary. Most of the housing in L'Anse is located very close to the centrally-located school, downtown, and recreation facilities, however, the neighborhoods directly east of the school, accessed by River Street, need sidewalk facilities so that youth do not have to walk in the road or the grass along this connector street. Some neighborhoods and the linear mixed-use district would benefit from the addition of **small parks and gathering areas** and the opportunity for neighbohood community gardens.

The Village's values toward growth and development are reflected in their Vision Statement, Goals, and Objectives. Following is a summary of the Vision Statement and Goals. Objectives are presented in the Strategic Plan of Chapter 6.

Village Vision Statement

The Village of L'Anse will be recognized as a "Community of Choice" that has embraced diverse opportunities and achieved community resilience. Residents, property owners, and visitors will experience high quality-of-life resulting from collaborative and aligned practices in support of healthy and sustainable economic, built, social, and natural environments. L'Anse will continue to be the place where people feel safe to put down roots and build for the future.

Village Goals

1. **Smart Growth (SG):** ***Ensure that new development follows the Smart Growth tenets and policies presented in this plan, such as prioritizing compact development and channeling new development to make the best use of existing infrastructure. This will enhance efficiency in public service provision and infrastructure maintenance, and help preserve natural resource lands.***

2. **Sustainable Development (SD):** ***Promote development that is consistent with a future-oriented vision and that upholds an ethic of stewardship that encourages individuals and organizations to take full responsibility for the economic, environmental, and social consequences of their actions.***

3. **Economic Sustainability (ES):** ***To achieve a sustainable economic development program that balances social and environmental considerations along with economic considerations in the production and distribution of goods and services, and implements strategies that address current needs along with the needs of future generations. To collaborate to enhance fiscal efficiency, stretch limited economic resources, and increase organizational capacity.***

4. **Sustainable Tourism (ST):** ***Continue to provide for tourism development as a way to diversify the community economic base and attract potential new residents.***

5. **Green Economy (GE):** ***Enhance the Village's ability to participate in the Green Economy to create new economic opportunity.***

6. **Community Resilience (CR):** ***Build community resilience by enhancing local self-sufficiency and creating a collaborative community framework to address anticipated economic, social, and environmental change.***

7. **Cultural & Historic Resource Enhancement (CH):** ***Preserve important cultural and historic resources for the enjoyment and education of future generations. These resources provide a link to the past, enhance a sense of place, build community pride, and provide potential for increased tourism and economic vitality.***

8. **Public Recreation & Scenic Resources Enhancement (PR):** ***Preserve and enhance public access and enjoyment of unique natural amenities and create a community that supports active living and recreation environments.***

9. **Social Environment & Quality-of-Life Enhancement (SQ):** ***Pursue strategies that sustain L'Anse as a safe and healthy place to live, support a sense of a diverse yet cohesive community, preserve community traditions, and provide opportunities for all residents to be engaged in the social sphere and help accomplish community goals.***

10. **Public Services Resource Enhancement (PS):** ***Provide for efficient public service provision and facility management to most effectively protect and utilize public investment.***

11. **Public Facilities Resource Enhancement (PF):** ***Make sure that all public facilities set a good example for sustainable design and operation and provide an essential public service in the most efficient manner.***

12. **Transportation Enhancement (TE):** ***Continue to grow and improve the transportation infrastructure that is key to economic growth in the region, including roads, bridges, non-motorized facilities, air service, and rail lines.***

13. **Utility Infrastructure Enhancement (UE):** ***Continue to grow and improve the physical infrastructure that is key to economic growth in the region, including utility service, power generation and transmission infrastructure.***

Chapter 2: Village Profile

In this section of the plan, a general profile of the Village of L'Anse is presented. This section is not intended as an exhaustive inventory of all the aspects of the Village, but is meant to give some background and general context of the existing demographics and condition of natural features, infrastructure, and development patterns.

Geographic Context

The Village of L'Anse is located in the western Upper Peninsula of Michigan in Baraga County. Keweenaw Bay forms the western boundary of the Village, and several major streams flow through the Village. L'Anse Village is enclosed within the boundaries of L'Anse Township, and it is the Baraga County seat. According to the Keweenaw Bay Indian Community (KBIC) representative, about 269 acres of L'Anse Village is contained within the L'Anse Reservation. Counties adjacent to Baraga County include Houghton to the west, Iron to the south, and Marquette to the east. The Village Hall is located on Main Street in downtown L'Anse.

The Village of L'Anse lies on US-41 between the two significant cities of Marquette (about 68 miles away) and Houghton (about 33 miles away). This region includes part of the Great Lakes Circle tours, national forest area, and numerous state parks, and attracts over 2 million visitor-days of travel per year. The region has several post secondary institutions including Michigan Technological University. Total regional enrollment is estimated at approximately 7,000. There are commercial passenger airports at Marquette County, and Houghton County. An intercity bus serves Gogebic, Houghton, Baraga, and Iron Counties. Short line rail service is available in Baraga County, mainly for timber, paper mills, and iron ore industries. Two commercial water ports are in the area.

Figure 2-1: Geographic context of L'Anse Village, Baraga County, MI

Historic Context

The historic context of L'Anse Township revolves around the boom and bust of various types of economies, mostly based on area natural resources. Early area settlements were established by American Indians, missionaries, and French fur traders, although it wasn't until the Houghton and Ontonagon railroad announced plans to make the area a terminus for their rail line that the Village of L'Anse started to take shape. Transportation, including the railroad, was instrumental to the early formation of the Village as a trading center for the Upper Peninsula. The Great Lakes were a water highway linking the raw materials that fostered the age of steel (rich timber and mineral deposits) with eastern industrial districts. Three quarters of the iron ore in the United States was in the hills surrounding Lake Superior, and L'Anse was a natural port. Transportation was needed to get minerals and timber between the mines and mills and the docks.

During the mid-1860's, a stage coach line traveling through the Village of L'Anse was built connecting Houghton and Marquette. The stage coach line not only brought passengers and supplies to L'Anse but it also provided mail service, connecting L'Anse to the rest of the area and providing the foundation of an economic boom in the area. News of iron deposits, timber, peat, slate, and quartz in the area spread quickly.

In the early 1870's, the Houghton and Ontonagon Railroad laid out a route from Lake Michigamme to the Bay of L'Anse. By December 1872, the railroad connected Houghton, Ontonagon, Marquette, Smith Mountain (Republic Mine) and L'Anse. The railroad project brought many people into the area to search for ore deposits, work in the construction industry, or work in local businesses. The geographic location of L'Anse was very important for shipping. The cove shape of Keweenaw Bay, Lake Superior, provided a protected harbor for ships carrying passengers and supplies. Completion of the ore dock and railroad allowed ore to be transported by ship from the various mines in the area. During

Top: L'Anse, Michigan, 1881.
Bottom: Ford Saw Mill, L'Anse, Michigan. Source: http://www.lansetownship.org/township_history.html

this time, homes and businesses were rapidly built or transported to the Village of L'Anse if the owners could not wait for construction. In less than seventy days, sixty buildings were erected. It seemed as though L'Anse would become the trading center of the Upper Peninsula, and the price of land skyrocketed.

However, the National Panic of 1873 brought economic hardship to the Village, limiting further expansion. At the beginning of the Panic, many businessmen moved out of the area; however, the businessmen who stayed found promise in the logging and lumbering industries. Twenty – three years later, in 1896, the Village of L'Anse and the ore dock were destroyed by fire that started at the L'Anse Lumber Company. The town was quickly rebuilt and began to grow once again.

When the Marshall Butters Sawmill was constructed in 1911, the area lumber industry took off once again. However, the World Wars also had a detrimental impact on the area economy. Shortly after the end of World War I (1918), the cost of production of copper exceeded the price and the copper market fell, signaling the end of prosperity in Keweenaw Bay. The Marshall Butters Sawmill was sold to Steams and Culver in 1915 and then sold again on January 1, 1923 to the Ford Motor Company. Around the same time the Ford Motor Company purchased vast amounts of land along with the Pequaming Mill and mills in Big Bay and the Iron Mountain – Kingsford area. The lumber processed at his sawmills were used in the wood panels on Ford's automobiles.

1940 Main Street L'Anse. Source: Superior View Photo

In 1936, the State of Michigan began construction of a scenic highway (US 41) which followed the shore of Keweenaw Bay.

The start of World War II saw many people in the area leave for the cities to find work. Ford operated the mill in L'Anse until October 27, 1954 when it was dismantled and sold. With the shift to more synthetic material and the subsequent closure of the mills, the automotive industry ceased to drive the economy of the area. The area returned to its rural character with few reminders of the early industrial boom. Like many rural areas, the economy has since shifted to a service-oriented economy, although some wood products industries still prosper in the area.

Population and General Demographics

Any plan must be based on an understanding of the people in the community. Population analysis and projections are basic plan elements that impact future land use decisions, community facilities and services.

Population Characteristics

The table below outlines the population characteristics for the Village, L'Anse Township, Baraga County and the L'Anse Reservation. While the Village and Township lost population, the County did experience a 1.3% gain.

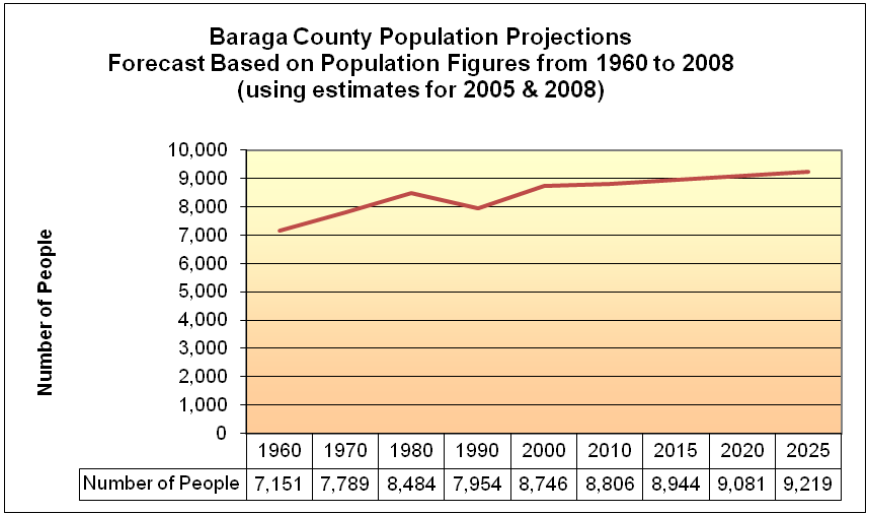
Population Characteristics, 2010	Village of L'Anse	L'Anse Township	Baraga County	L'Anse Reservation & Off Reservation Trust Land
2010 Population	2,011	3,843	8,860	3,703
2000 Population	2,107	3,926	8,746	3,672
% population change 2000-2010	-4.6%	-2.1%	1.3%	0.8%
# of males	958	1,884	4,863	1,796
# of females	1,053	1,959	3,997	1,907
Under 5 years	132	226	417	222
18 and over	1,551	2,944	7,066	2,748
65 and over	439	725	1,531	623
# White	1,785	3,134	6,641	2,385
# Black	28	28	635	14
# American Indian, Eskimo, Aleut	100	469	1,160	1,076
# Other	100	212	424	228
Median Age (years)	41.7	43.0	42.9	41.0
Persons In School (thru High School)	493	808	1,543	788
% HS Grad or higher-25 years and over	90.3%	88.8%	82.2%	87.9%

The 4.6% population decline experienced in the Village is not unique to L'Anse, as most cities and villages in the Upper Peninsula lost population in the last decade, the exceptions being the university towns of Marquette and Houghton.

Like many rural areas, the L'Anse area population is dominated by older persons. Nearly 22% of the population of the Village is 65 years and over. This demographic is especially significant as older person have different service needs and desires than younger persons.

With a median age of 42.9, Baraga County's residents are younger than all Western U.P. counties except Houghton, which is influenced by a large college population. However, Baraga County's median age is still higher than the state's of 38.9.

Racially, Baraga County's population is 75 percent White. The 25 percent minority population is much greater than other Western U.P. counties and also higher than the state percentage. Most of this minority population is made up of 1,512 American Indians (17.1 percent of the county's population) – by far the largest single minority group in the Western Upper Peninsula. Most of the Indian population lives on the L'Anse Indian Reservation, the land base of the Keweenaw Bay Indian Community. The reservation includes nearly one-third of the county's area, encompassing most of the Village of Baraga and part of the Village of L'Anse as well as outlying areas. Reservation and off-reservation trust land has a population of 3,703, including 1,076 (29.1 percent) Indians



	1960	1970	1980	1990	2000	2010	2015	2020	2025
Number of People	7,151	7,789	8,484	7,954	8,746	8,806	8,944	9,081	9,219

Population Trends

Total U. S. Census population figures for Baraga County show a doubling of the population for the decade from 1900 to 2000. The County population peaked at 9,356 in 1940, then dropped to 7,151 in 1960 after the closing of the mills. Although the County population has been on a mostly upward trend since 1960 (8,860 in 2010), the population has not yet regained the peak levels reached in 1940.

Employment & Industry

An analysis of economic base helps a community create policies and programs that can lead to steady economic growth over the long run. It reveals how people in the community earn a living and the kinds of business and industries the community needs and could support. This provides a benchmark to plan for housing, schools, utilities, and other services.

Industry Composition

The table below provides a glimpse into the industry composition of Baraga County.

Educational services, and healthcare & social assistance	809
Manufacturing	381
Arts, entertainment, & recreation, and accommodation & food services	316
Public Administration	286
Retail Trade	213
Construction	123
Agriculture, forestry, fishing & hunting, and mining	114
Professional, scientific, & management, and administrative & waste management services	106
Finance & insurance, and real estate & rental & leasing	103
Other services, except public administration	98
Transportation & warehousing, and utilities	93
Wholesale trade	52
Information	33
TOTAL 25+ years of age	2,727
Non-government	2,007
Government	727

Source: American Community Survey, 2012

Employment & Industry Summary and Implications

The following summary indicates employment and industry strengths and opportunities based on an inventory of the region, County, and Village. To deal with employment challenges, L'Anse area communities are joining in a spirit of cooperation to focus economic development efforts.

In the region, the mostly service-based economy is clustered in the Baraga/L'Anse and Houghton/Hancock areas. Among those living in a 30 mile radius of L'Anse, most jobs in 2006 were in educational services, health care and social assistance, retail trade, accommodation and food services, manufacturing, and public administration. Industries that had substantial increases in numbers employed from 2004 to 2006 include manufacturing and professional, scientific, and technical services. This is good news as both these industries draw wealth from outside the community (not just serve the needs of the community). Industries with substantial decreases in number employed for the same period include health care and social assistance, retail trade, and construction. Most of these jobs are secondary, supported by base sector jobs, and serve local needs. In the region, there has been percentage job growth in the waste management, manufacturing, and medical fields. Future occupational growth is expected among engineers; arts, design, entertainment, sports, and media occupations; business and financial operations; community and social services; construction and extraction; education; food preparation; healthcare; maintenance and repair; management; administrative; personal care; production; protective services; sales; and material moving occupations.

Baraga County has experienced growth in the size of the labor force, which provides an opportunity for the right industry. Location quotients are ratios that compare employment by industry in a local area to a reference area, in this case, the United States. In Baraga County, areas of industry concentration/competency include forestry and logging; machinery manufacturing; fabricated metal product manufacturing; accommodation; food service and drinking places; and heavy and civil engineering construction. Industries of low concentration in the County, representing opportunity for growth, include specialty trade contractors, general merchandise stores, nursing and residential care facilities, insurance carriers, and professional and technical services. Industries that could represent an opportunity for L'Anse based on low concentration in Houghton County include printing and related support activities; food manufacturing; merchant wholesalers of durable and nondurable goods; electronic markets, agents, and brokers; electronics and appliance stores; health and personal care stores; truck transportation; waste management and remediation services; amusements, gambling, and recreation; telecommunications; real estate, professional and technical services; and administrative and support services.

In L'Anse, the largest industries (based on employment) were educational and health services; manufacturing; arts, entertainment, recreation, accommodation, and food services; public administration; and retail trade. Major Village employers include Baraga County Memorial Hospital, CertainTeed Gypsum Inc., Ferrellgas, L'Anse Area Schools, Baraga County Extended Care (nursing home), the local supermarket, Baraga-Houghton-Keweenaw Child Development Center, Erickson True Value, and Baraga County government. The

L'Anse Warden Electric Plant propelled the Village into the "Green" economy by creating 20 new jobs and 25 or more spin off jobs in 2008.

Major County employers include the Michigan Department of Corrections, Pettibone Traverse Lift (materials handling), Keweenaw Bay Indian Community (casino, hotel, community college, government), Baraga Area School District, L'Anse Manufacturing, Northern Tool, Selkey Manufacturing (steel fabricator), and Van Straten Brothers (metal fabrication and machining).

Economic Development and Jobs: Potential Opportunity

Tourism

Because of the Village's natural and locational assets, tourism is a significant component of economic development opportunity. Assets include coastal areas, public forest lands, inland lakes and rivers, campgrounds, waterfalls, trails, and parks. These resources attract hunters, anglers, snowmobilers, and other outdoor enthusiasts.

There are some limits to tourism development. Because of the sometimes seasonal and sporadic nature of tourism, communities cannot depend on this one industry for economic sustenance. For greater sustainability, L'Anse Village should participate in a regional partnership to create a critical mass of unique attractions to serve a tourism base focused on Michigan, Wisconsin, and Canadian residents. Future possibilities include eco-tourism and cultural/historic tourism. Eco-tourism provides unique educational opportunities and experiences to those who value pristine and protected natural and cultural areas. This kind of tourism offers participants insight and a greater appreciation of natural habitats. This form of tourism also provides financial benefits to support conservation. Similarly, a local food system could be promoted through agri-tourism, which could involve tours of facilities and seminars to teach best practices.

The area provides great opportunity for interpretation of history, including the Ford history. Opportunities to improve mainstay tourism activities such as sport fishing, camping, hiking, hunting, and mountain biking should also be pursued.

Knowledge Economy

Communities that have creative and talented people, modern information technology infrastructure, and the foresight to plan for the new economy have greater wealth generation potential through technology based economic development. The proximity of Michigan Technological University and the Keweenaw Bay Ojibwa Community College gives a boost to this potential in Baraga County and the surrounding municipalities. This is particularly true since Michigan Technological University has created a SmartZone in Houghton/Hancock, which is a technology center designated to promote resource collaborations between universities, industry, research organizations, government, and other community institutions to create technology-based business and jobs. There are now 15 SmartZone

technology clusters in Michigan, including the one in Houghton. This SmartZone will focus on aviation, injection-molded plastics, precision-machined surgical tools, precision bearings, electronic manufacturing, and robotics. Michigan Technological University will be the area focal point for direct innovation and implementation.

When enterprises move into the commercialization phase, jobs are created in communities having the desired infrastructure, labor pool, amenities, quality-of-life and other factors that facilitate the location of high-skilled, high-wage jobs in the knowledge economy. This is why it is important for Village of L'Anse to focus on increasing the knowledge and skills of the workforce, updating technology infrastructure, and improving public amenities within the population center.

Green Economy

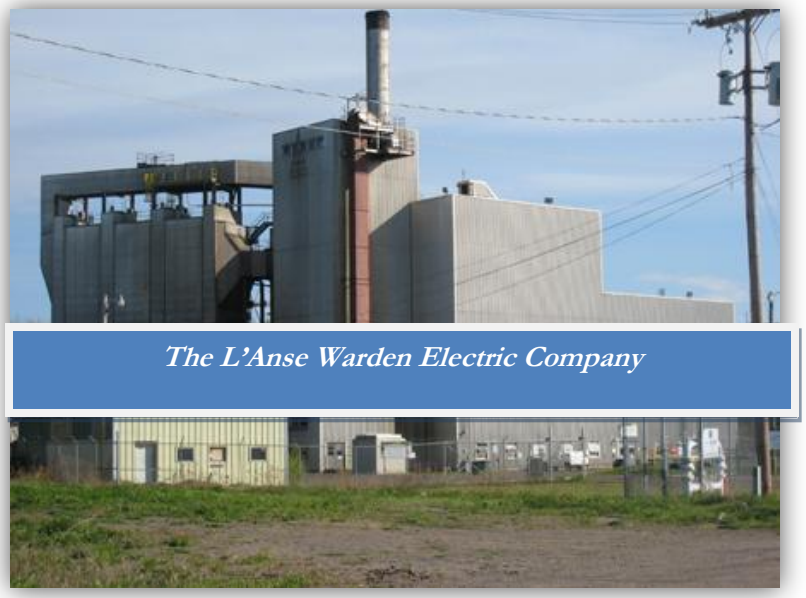
Private sector jobs in Michigan's green economy are defined as being in 5 areas, including agriculture and natural resource conservation; clean transportation and fuels; increased energy efficiency; pollution prevention or environmental cleanup; and renewable energy production. Clean transportation and fuels is the largest green economy area in Michigan, reflecting Michigan's automotive heritage. Today green jobs represent just 3 percent of Michigan's overall private sector employment, but the green economy expanded by almost 8 percent from 2005 to 2008. The renewable energy production sector, while currently the smallest sector, is also the fastest growing at 30 percent growth. The green economy is also a hotbed of entrepreneurial activity and above average wages.[1]

Many green jobs are in production, engineering, and construction, but all skill levels are required. Other jobs include assemblers, machinists, HVAC installers, general maintenance, farm workers, mechanics, and environmental specialists. Job growth is expected for engineers, skilled trades, and certain technical specialist jobs.

New jobs exist for energy auditors.

Employers indicated that the majority of their employee training needs may be conducted on-the-job. Shop and vocational classes in high school and "old school" drawing and drafting skills and basic skills that need to be brought back were cited as issues by Michigan employers. Knowledge of green practices (ways of working that minimize damage to the environment); green knowledge (understanding concepts such as which materials can be recycled in many ways, awareness of opportunities to implement green practices, and the ability to apply concepts to new situations); and green skills (those which contribute actively to environmental improvement, such as

energy auditing, installing insulation, working with new materials, and so forth). Employers say it is hard to find people with safety knowledge, mechanical aptitude, ability to do non-computerized drawing, ability to read blueprints, know "what" to draw as well as "how" to draw, basic machine design skills, adaptability, understanding green standards and guidelines, material recycling awareness, systems specialization (solar, wind, geo-thermal, rain water, etc), environmental impact knowledge, MIOSHA training, communication skills, marketing and general business management skills, visual relationship aptitude, and ISO 14000 certification.



The L'Anse Warden Electric Company

There are "green job" training programs in the Upper Peninsula at several institutions such as Lake Superior State University (Sault Ste. Marie), Bay de Noc Community College (Escanaba), Gogebic Community College (Ironwood), Michigan Technological University (Houghton), and Northern Michigan University (Marquette).

The green economy in Michigan is supported by local, state, and federal public policy such as Michigan's new renewable energy portfolio standard requiring utility companies to spend a portion of their revenue on energy efficiency measures for their customers. There are also incentives for advanced battery production.

L'Anse has several firms involved in the renewable energy production cluster which includes power and communication line and related structures construction; natural gas distribution; sawmills; electric power distribution; and logging. This sector showed a growth rate even during the period of economic slowdown. The L'Anse Warden Electric Company brings green technology to the area as well as jobs and spinoff jobs. The company diverts waste from other industries like the lumber and sawmill industries and keeps it from going to landfills by converting biomass to energy.

The company converted the former coal-, oil- and natural gas-fired generating station to run on biomass, reducing pollution emissions in the area. Raw materials include wood chips, paper-mill residue (from the neighboring CertainTeed plant and others), tire chips, railroad ties, construction/demolition debris, bark and twigs, etc. In a synergistic relationship, CertainTeed then utilizes steam from the electric plant.

The L'Anse Warden plant is also looking into ways to create their own supply of woody biomass through a fast-growing, renewable willow shrub. Much more research and testing is needed to optimize this agricultural product, and difficulties are posed by keeping deer and other pests away from the new plants for at least two years. Timber produces approximately 0.5 dry tons of biomass per acre a year. Pulpwood produces approximately 1.7 dry tons per acre per year. Energy plantations produce on average 4 dry tons per acre per year, although results vary widely. One ethanol plant, for example, needs 500,000 dry tons per year, which is the equivalent of 1 million acres of timberland or 125,000 acres of energy plantations. The haul radius of materials from energy plantations is one-third that of timberlands if the plantations are 8 times more productive. So there is a question of sustainability and capacity of this industry. It is too costly to convert ambient forest to biomass production, so it is best to use retired or abandoned cropland. It may be more viable to use a European model to take portable pellet factories to 500 acre plots and ship pellets directly to homes for heating supplies.

CertainTeed is also boosting the green economy by securing third-party GreenCircle certification for 20 of its ceiling products and unveiling more environmentally friendly recycled packaging for its products. The GreenCircle certification verifies the manufacturing process and use of recycled materials. In this way, CertainTeed products help contribute points toward LEED certification. CertainTeed is headquartered in Valley Forge, PA, and in 2009 was named ENERGY STAR Partner of the Year by the U.S. Environmental Protection Agency.

Building Local Community Resilience

Building local resilience means improving the ability of a community to respond to energy, economic, or social shocks. It means enhancing community self-sufficiency and creating a collaborative community framework. It takes foresight and leadership to achieve. Two topics that easily bring people together to practice collaborative efforts toward community resilience are the pursuit of local food systems and support of local businesses, both of which have the potential to create local jobs. Local energy production is discussed in the next chapter.

Local Food Production

Within today's conventional food system, food production, processing, and distribution is industrial in scale and relies on advances in bio-technology. Food consumption generates a significant amount of packaging waste. In this system, corporations and agri-businesses, not farmers, are dominant stakeholders. Consumers are removed—physically and metaphorically—from the source of their food. The process is characterized by the use of significant amounts of synthetic fertilizers and pesticides and new shipping technologies, much based on the availability of cheap oil. America must buy most of this oil from foreign nations in an increasingly competitive environment.

Today's conventional system is both energy-intensive and inefficient. It takes roughly eight calories of energy to produce one typical food calorie. Food distribution occurs over large distances (estimates suggest that the average food item travels about 1,500 miles). A

significant amount of risk is associated with this food production and distribution system. There is a greater concentration of ownership, which means that the community food supply is dependent on decisions made by absentee business owners. Giant food retailers dominate the market. The vertical consolidation of the production and distribution process puts the whole system under the control of single entities. The vast scale of industrial food production also poses risk of widespread contamination when there is a problem.

In contrast to a conventional food system, a community food system makes visible the relationships between producers, processors, distributors, and consumers of food. A community food system is place-based. Because the community values the place, a community food system promotes the use of environmentally sustainable methods for producing, processing, and distributing food. Local distribution networks minimize the use of fossil fuels, and reduce the risk should those supply lines become disrupted. Local grocery stores generally only contain about a 3 day supply of food for the local community, so even a short supply disruption can create a crisis.

A community food system facilitates access to healthful and affordable foods at all times, increasing food security. As stated in the American Planning Association policy guide on community and regional food planning, food sector jobs represent close to 15 percent of the total workforce of many communities, while retail food sales can be as much as a fifth of a community's total retail sales. Creating a local food system creates local jobs and keeps wealth within the community.

Example of an aquaponics facility.

Planning for the creation of a local food production and distribution system involves taking an inventory of the existing organizations and businesses that are involved in local and regional food production, processing, and retailing; involving community stakeholders in determining a cohesive vision and goals for the creation of a community-wide food system; illuminating the vulnerabilities that exist within the system; evaluating the various strategies that will contribute to a sustainable community food system; prioritizing actions and creating an implementation plan; and establishing benchmarks for measuring success in accordance with the community vision and goals.

This plan supports the creation of a community food system. It recognizes the importance of creating food security and supporting a local food economy. This plan recognizes the difficulty in creating a self-sustaining food system with the challenges of climate and short growing season in the Upper Peninsula, but also recognizes that researching and creating a successful "northern" model for local food production is a great opportunity that may also benefit other communities. Local production opportunities such as community gardens, edible landscaping, and appropriate urban farming will be supported in the community's ordinances, as will local distribution opportunities such as farmer's markets, food stands, and small neighborhood stores. The community will take steps to provide a good example by featuring edible plantings in public parks and schools and creating community and youth gardens. The community can support increased food production by residents by creating share programs allowing those without garden space or with shaded lots to utilize public open space and tax foreclosed properties for food production activities. The community will also support initiatives to develop community food processing systems such as community kitchens, food business kitchen incubator facilities, and entrepreneurial urban agriculture projects. Future ordinances will protect solar access for energy and food production. However, the Village will look for opportunities to purchase and utilize land for centrally located community gardens to facilitate local food production.

In addition, the Village should consult with the L'Anse Warden Electric Company to see if their heat by-products can be used to heat community greenhouses or hoop houses or to support aquaculture or aquaponics facilities. Aquaponics involves growing fish and plants together in one integrated, soilless system. The fish waste provides a food source for the plants, and the plants provide a natural filter for the water the fish live in. The process provides safe, fresh, organic fish and vegetables. In northern climates, a cheap and ready heat source to provide year-round production is an advantage. A sustainable system would include a central facility to supply fish fingerlings and plant seedlings, source supplies, and market the crops. For a more complete system, fish food such as duck weed, water lettuce, and worms can be produced as well. Satellite facilities will focus attention on crop production. This kind of system can also be implemented as a hobby or backyard garden system so that families can grow all the fish and vegetables they need. Recycled plastic containers can be used for aquaponics systems. This can help to create a more resilient community. Local expertise is needed to help set up the systems, so this can be a new employment opportunity. In addition, the facility can be part of an agri-tourism program that will involve area educators, students, and residents as well as tourists.

Supporting the Local Economy with Strong Local Businesses

Studies have proven the importance of local businesses to a sustainable economy. In a case study called "The Case for Local vs. Chain Retailers", Civic Economics determined that locally owned and operated merchants generated three times greater impacts on local economies than national chains because of a greater utilization of local labor, purchasing of local goods and services, and retention of profits in the local economy. Local businesses are more likely to make charitable contributions or provide volunteer support within the community where they have a vested interest. They are more committed to a local workforce and are less likely to relocate. Additionally, in an increasingly homogenized world, communities that preserve their one-of-a-kind businesses that build distinctive character have an

economic advantage. Small businesses help sustain vibrant, compact, walkable downtowns and therefore reduce sprawl and the need for long supply networks, and automobile use. They require less infrastructure and impervious surfaces, and promote efficient public service provision. This is not to say that other businesses are unimportant or unwelcome. But making sure that community employment is diversified beyond single, large, and often remotely-owned businesses is a good step toward increasing local resilience.

Chapter 3: Village Resources

Village resources include elements of the built environment, social environment, and natural environment. These resources may also be either publicly- or privately-owned. All these elements are inter-related, and the health or well-being of each contributes to community sustainability. It is important to look at Village resources from a comprehensive and systemic point of view.

Built Environment Resources

The built environment consists of buildings and transportation and utility infrastructure. Buildings are important in that they frame the public space which is usually defined by street systems. Building facades provide a public face for private investment. Well-maintained buildings with pleasing aesthetics illustrate community pride and health and thus contribute to economic opportunity.

Buildings and infrastructure also impact quality-of-life. For example, universal building design and accessibility standards make it possible for people to age-in-place rather than move away from family or friends to go to group facilities. Buildings that are energy efficient contribute to affordability of housing and viability of businesses, and reduce community energy production demands.

Historic Resources

Historic buildings provide a link to the past and a sense of continuity for successive generations. They create a unique and authentic character that can contribute to economic development and attraction of residents. The Village of L'Anse has retained many beautiful historic buildings, including churches, schools, and civic buildings. Although many of these structures aren't currently listed in historic registers, they preserve a unique charm and sense of the past.

Top: United Lutheran Church
Center: United Methodist church
Bottom: Private residence

The Baraga County Courthouse is listed on the State registry. Built in 1884, it is a two-story, red brick, late Victorian building that today remains the county seat. It is just up the hill from the L'Anse Village Hall.

There are several properties on the National Historic Registry in the area; Assinins (historic district on US 41 near Baraga), the Avon Township Hall in Skanee, the Hanka, Herman, & Anna Farm (historic district) in Pelkie, the Hebard-Ford Summer House (also known as the Ford Bungalow) in Pequaming, and the Kewawenon Mission (also known as the Zeba Indian United Methodist Church) in Zeba just north of L'Anse. The Sand Point Site and Sand Point Lighthouse are also on the registry, as is the old US-41 Backwater Creek Bridge. The Hanka, Herman & Anna Farm is currently being operated as a museum.

The Hebard-Ford Summer House was used from 1900 – 1924 as a camp for the Ford family. It is located on the shore of Lake Superior in Pequaming. The two-story, 5,000 square foot Bungalow boasts nine bedrooms, six baths and a dining room table fit for 16 guests. Its lineage extends back to the beginning of the town of Pequaming in the late 1870's when the town was established by an Englishman named Charles Hebard, who also built a lumbermill with H.C. Thurber. In time the town grew to reflect Hebard's homeland with its boarded walks, shingled houses and tree-shaded streets. The Ford Bungalow and remains of the mill, one-room schoolhouses, and other historic structures still exist. Pequaming also has a beautiful old cemetery for exploration, as does Aura, the Village of L'Anse, and Herman.

The Kewawenon Mission, also known as the Zeba Indian United Methodist Church, is located on Front Street in Zeba between the Whirl-I-Gig Road and Peter Marksman Road, about 3.5 miles northeast of L'Anse. This site is noted as the birthplace of Indian Methodism in the Western Upper Peninsula. The mission has continued to operate, and represents one of the oldest and most

Above: Baraga County Court House on the hill overlooking the L'Anse Village Hall. Below: Zeba Indian Mission United Methodist Church

successful integrations of Native American and European religious traditions. The present day structure was built in 1888.

Henry Ford also created the Village of Alberta just 9 miles from L'Anse on US-41. The idea was for workers to log in the winter and mill their lumber and farm in the summer. The village opened in 1937. Farming proved to be ineffective because of poor, rocky soil and the deer who ate all the crops. The village was unique from other company towns in that each of Alberta's twelve houses were all architecturally different from each other, with varying layouts and square footages. This was meant to be a self-contained Village with a store, post office, sixty additional houses, a road around the lake, lake front park, and ski hill and toboggan slides in the surrounding hills, but these were never completed. However, even in the 1930's, visitors flocked to the town to view displays of logging equipment and the quaint village. In 1954, the lumber community of Alberta with its well-equipped sawmill and over 1,700 acres of adjacent timberland were donated to the Michigan College of Mining and Technology (present-day Michigan Technological University) for use in research in methods of timber management and utilization and forestry.[1] A museum is maintained by the Alberta Village Museum Association and open to the public during the summer months.

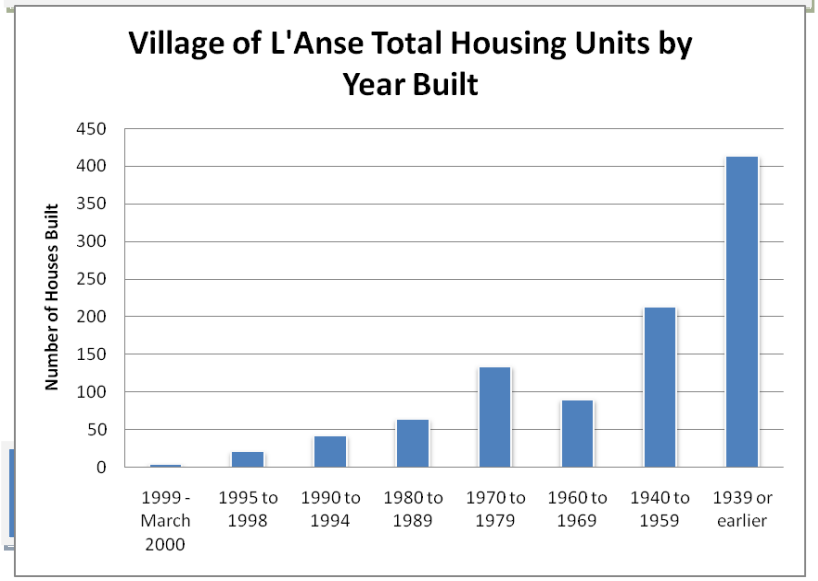
Housing Resources

Shelter is a primary need of every community. Meeting the housing needs of residents in different stages of life and circumstances can help to revitalize rural communities and retain residents. One way to do this is by supporting mixed-use neighborhoods which combine residential and neighborhood commercial uses in an effort to promote walking and a sense of community. L'Anse already has a tradition of this. However, it is always a challenge to maintain housing conditions in tough economic times, especially with older housing stock. This section looks at existing conditions and future needs for housing infrastructure.

Housing Statistics

Figure 3-1 illustrates that most housing in the Village of L'Anse was built prior to 1939. These structures are most likely a result of the rebuilding efforts after the fire. There was also a building boom after

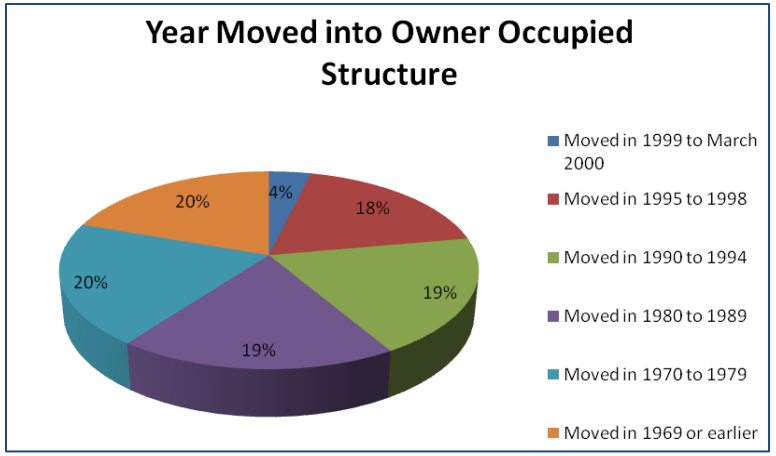
Figure 3-1: Total Housing Units by Year Built



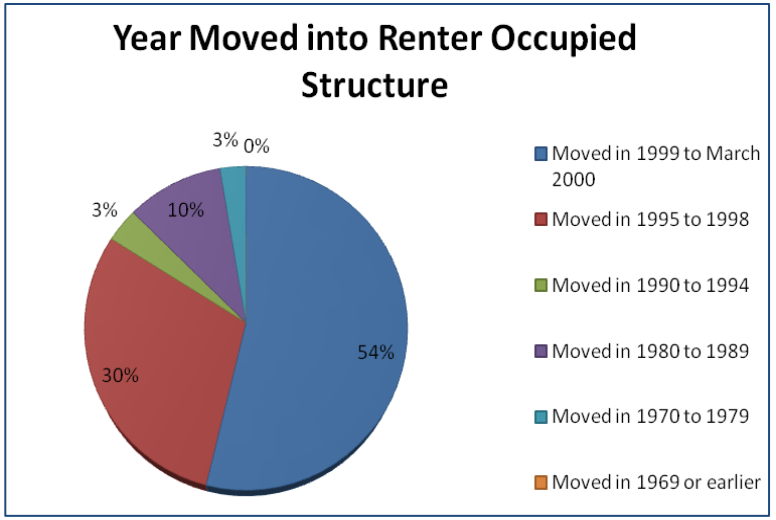
[1] Cleven, Brian. "Henry Ford's 'Tasty Little Town': Life and Logging in Pequaming". Michigan History Magazine. Jan/Feb 1999.

WWII and in the 1970's. This creates an opportunity for home retrofits to improve energy efficiency in entire neighborhoods.

As you can see from the charts at right, about 40 percent of owner-occupied structures have been occupied by long-term residents (moved in between 1979 or earlier). Another 38 percent moved into their homes between 1980 and 1994. Eighteen (18) percent moved in 1995 to 1998, and only 4 percent moved in 1999 or later. The situation is much different for renters, 54 percent of whom moved into their residences in 1999 or later. A total of 84 percent moved into their structures in 1995 or later.



The 2010 U.S. Census count for total housing units in the Village of L'Anse is 988 units, which is an increase of 7 units since 2000. The Village is largely built out for residential development, unless redevelopment of underutilized structures occurs. The Village of L'Anse had a higher occupancy rate than the County or Congressional District in 2000. Eight-eight percent (874 units) of total housing units were occupied in the Village of L'Anse in 2010, compared to 91 percent in 2000. Occupancy rates for other areas were as follows; State of Michigan 89 percent; Congressional District 1 (106th Congress) 71 percent; and Baraga County 65 percent.



Of the occupied housing units in the Village of L'Anse in 2010, about 71 percent were owner occupied, and 29 percent were renter occupied. All other jurisdictions of comparison have higher owner-occupancy rates (Michigan 74 percent, Baraga County 78 percent, Congressional District 79 percent). So it seems that L'Anse is able to contribute to provision of rental housing for the area.

Most of the housing in the Village of L'Anse is located north of the Highway 41 corridor. There is one mobile home park and one neighborhood which consists of two long blocks of houses just south of US-41. These neighborhoods lack pedestrian amenities, and are separated from the rest of the Village by the highway corridor. Although the housing neighborhood has access to the informal trails

surrounding the cemetery and hills and river basin, it could use a mid-block pedestrian connection, small neighborhood park, and pedestrian crossing over US-41. These neighborhoods might also benefit from a bike trail along the river down to the old powerhouse park facility. There are also some homes in the rural area along the river.

Most of the housing in L'Anse is located very close to the centrally-located school, downtown, and recreation facilities. The neighborhoods directly east of the school, accessed by River Street, need sidewalk facilities so that youth do not have to walk in the road or the grass along this connector street. Some neighborhoods would benefit from the addition of small parks and gathering areas for young children and senior citizens, and the opportunity for neighbohood community gardens. There is also a need to extend the sidewalks to the northern-most neighborhoods east of Main as walkers frequently use this corridor.

Above: Broad Street
Below: Main Street

There may be a need, based on changing demographics, for senior assisted-living or independent living facilities. The Village should consider facilitating a cottage community development with small, closely clustered units to serve the need for the elderly to live in smaller homes with support services while aging in place.

The Village should also embrace the waterfront by pursuing redevelopment opportunities of obsolete buildings to add prime residential condos or attached housing along the waterfront in the downtown. This would add more vitality and tax base for the downtown.

Because much of area housing is very old, the Village should look for opportunities to help with the renovation and energy optimization of housing infrastructure. This will strengthen and preserve the value of neighborhoods and preserve housing affordability in the face of rising energy costs. Included should be efforts to adapt homes to be accessible for the aging or disabled.

The Village should support home occupations within residential areas provided conditional standards regarding traffic, noise, signage, and visual impact are met. Some uses will not be appropriate. Home occupations provide economic opportunity which otherwise might not be possible, and has the potential to support new residents with internet-based businesses or people who do craft or fine-art instruction.

A 2016 Target Market Analysis was prepared for Baraga County by the firm Land Use USA, in cooperation with WUPPDR. This analysis provides valuable information on housing needs and opportunities for the Village of L'Anse. According to this report, "Based on the Target Market Analysis results for an aggressive scenario, there is a maximum annual market potential for up to 78 attached units throughout Baraga County, plus 100 detached houses (for a total of 178 units). Among the market potential for 78 attached units, less than half will be collectively captured by the two Villages of Baraga (14 units annually) and L'Anse (21 units). There will be 43 migrating households in Baraga County each year seeking attached units in locations other than the two villages. Compared to other counties in the Upper Peninsula region, a large share of the market potential for Baraga County will be generated by households choosing to live in the surrounding townships and unincorporated places like the Zeba – even if it means commuting for more job choices in the region's larger cities".

The report suggests this scenario for the Village of L'Anse could have a different market potential outcome if the Village continues its Placemaking efforts, which will help attract more demand for units.

Commercial/Industrial Resources

Once the community has determined the kinds of new businesses and industries it wants to encourage (those which will have the greatest local multiplier effect and which will curtail leakage of consumer dollars out of the community), and has established strategies to retain existing businesses, it must look to ways that public investment in infrastructure can stimulate private investment. Zoning and development standards relating to landscaping, buffering, and natural stormwater management can enhance the built and natural environment, ensuring economic assets are complementary to other Village assets.

Commercial Facilities

The Village of L'Anse has a compact downtown located one block off the lake. However, very few businesses have taken full advantage of the lake front location. For this reason, the Village of L'Anse Downtown Development Authority commissioned the study for a *Downtown Development Plan*.

The Downtown District includes an eight block area centered on the intersection of Broad and Main Streets approximately one half mile north of US Highway 41. Entrance to the Downtown traveling east on US 41 is typically from L'Anse Avenue. Traveling west on US-41, the entrance to the downtown is from Broad Street. The Broad Street entrance has a gateway entrance sign, but there is a lack of bold gateway signage coming from the west (in the direction of Houghton).

Pedestrians can readily access the downtown via the surrounding neighborhoods, and transient boaters from Lake Superior docking at the L'Anse Marina are only a short walk from downtown shopping and services. New streetscape projects have enhanced the pleasing pedestrian scale of Downtown with valued amenities including pedestrian friendly lighting, new boulevards with landscaping, and bump outs for improved pedestrian crossings at the main intersection. Public investment in pedestrian-oriented public amenities such as sidewalks, bike/walking trails, street furniture, lighting and banners, street trees, and green infrastructure (landscape buffers, rain gardens, bioretention areas) have many benefits. These include increasing property values and rents, increased private investment, improved stormwater management, enhanced sense of place, additional wildlife habitat, and urban heat reduction.

In addition to the streetscape projects, the Village recently constructed a new Village Hall and Fire Station on Main Street, linked by outdoor path and stairway to the County Courthouse. A future project will involve the extension of the break wall at the existing Marina to increase capacity. There is also a need to add landscaped islands and trees to the marina parking lot, creating a more pleasing transition from the waterfront to the Downtown, and creating a more environmentally sensitive way to manage stormwater near the lake. These landscaped islands should allow for the appropriate handling of snow in the winter months. The Downtown Plan notes that existing parking is sufficient for demand in the Downtown.

The Downtown Development Plan advocates the establishment of a façade enhancement program providing incentives for building owners to bring their buildings up to date—as opposed to looking out of touch. Care should be taken to respect and preserve the design details and scale of historic structures.

Front Street is the prime redevelopment opportunity area in L'Anse, as some prominent, underutilized structures contribute to the impression that the Downtown has turned its back on the waterfront. A context-sensitive, mixed-use development could help the community embrace the lake and add vitality, enhancing and complimenting the public open space amenity across Front Street. This type of development would provide opportunities for private commercial businesses and also new types of residential development that don't currently exist in L'Anse.

The Village has abundant pedestrian infrastructure in most areas, except for along the highway corridor and south of US-41. The addition of streetscaping including pedestrian scale lighting, street trees, and bicycle amenities along the highway corridor would increase the perception that visitors have arrived in a destination that is worth stopping to visit. More visible signage is needed at the western gateway entrance to downtown along US-41. Businesses along the highway corridor should be encouraged to incorporate landscaping in parking lots and along long, blank walls to improve community aesthetics, safely accommodate pedestrian traffic, and mitigate winter climate conditions. More wayfinding signage is needed along the highway corridor and throughout downtown. Commercial signage along the corridor should be regulated to be more consistent in appearance to reduce visual clutter.

In the Village currently, commercial businesses include, but are not limited to, restaurants; convenience stores; gas stations; personal services (hair care); car rentals; plumbing/heating and repair services; business, insurance, and financial services (accounting, credit unions, insurance agencies, catering); health and community services; real estate services; and retail. Both single- and multi-family housing exists in the Downtown District.

Industrial Facilities

Industrial infrastructure and development is currently contained mostly in the industrial park in the southeast corner of the Village on Dynamite Hill and near the power plant on the southwest side of the Downtown. The Village also owns potential industrial or commercial development sites on the western (near Lambert Rd.) and southern boundaries (near the power dam). Some of these properties are improved with utilities and public services. (See current land use maps in Chapter 5.)

The community offers a substantial fresh water supply and available land for industrial development. The L'Anse Warden Electric Plant provides a renewable energy supply.

The Village should place a priority on redeveloping vacant and underutilized properties before encouraging greenfield development, and should identify priority sites for redevelopment. Obstacles to development should be mitigated or removed for development in infill areas. This will help preserve the jobs/housing balance, create a stronger tax base, create efficient utilization of land and infrastructure resources, and preserve open space and potential farmland. Regulations should ensure that infill development will blend with the established community character.

New industrial development should be directed to existing industrial parks. New large commercial or industrial development on greenfield sites should be required to provide the necessary new infrastructure to ensure adequate provision of sewage disposal, stormwater management, potable water, and other critical public health and welfare concerns including the appropriate buffers.

Commercial and Industrial Resources Considerations

Compact Mixed-Use Development Patterns

A successful, 24-hour community requires a critical mass of diverse businesses and cultural attractions to sustain workers and residents. That is why it is important in small communities to concentrate commercial development as much as possible, especially if there is a historic downtown that could be undermined by highway strip development.

Mixing land uses (commercial, residential, recreational, educational, and others) in neighborhoods or places that are accessible by bike and foot enhances the vitality and perceived security of an area by increasing the number of people on the street. Mixed-use patterns let streets, public spaces, and retail stores again become places where people meet, thus helping to revitalize community life. Older communities such as L'Anse developed with a mixed-use pattern because walking was a more critical form of transportation before the widespread use of the automobile. Fortunately, L'Anse has maintained much of this pattern as if time had not brought the usual changes. In other communities, zoning ordinances were created to separate land uses to protect residences from the pollution and nuisances that sometimes came with commercial and industrial infrastructure. This led to sprawl development where stores, housing, and schools became so far apart that they could only be reached by car. Today, improved environmental regulation has meant that many industries are cleaner and the need to separate uses has diminished. Many nuisance impacts can be mitigated with proper buffer, screening, operation, and stormwater management practices. Businesses benefit from being in a location where a variety of uses attract more people. Mixed-use development can also be incorporated within the same building, for example, in allowing residences or office space above retail shops, therefore utilizing existing space more effectively.

The Village can facilitate mixed-use development by offering credit assurance, making an equity investment in a project, or providing secondary loans to developers who pioneer this kind of beneficial development. Credit assurance can be provided through a development finance insurance program (DFI). L'Anse would establish a source of capital and use it to insure private lenders against the risk of loss associated with construction financing for projects designated as catalysts for community development. The DFI fund is a form of escrow that lenders may draw upon in the event of default on a private construction loan, bridging the gap between risk and return. An equity contribution can take the form of a contribution of Village-owned land. The Village can also take a long-term equity position while a local foundation or development agency gets a midterm return on investment, and conventional financiers and developers receive the short-term returns. Development review should be streamlined for mixed-use, affordable housing projects. In this way, the Village will be investing in its long-term future.

Compact development patterns also accommodate public transit more effectively.

Blight in the Built Environment

Communities may identify blight differently, but it generally includes things like burned out houses waiting for demolition, lots overgrown with weeds and littered with trash, abandoned buildings, partially completed structures, inoperable cars parked on private property, dead trees presenting a public hazard, stagnant pools of water, and vacant, neglected buildings. These community problems detract from vibrant communities and sap community spirit. They present a poor first impression, deter potential new residents and visitors, and potentially decrease adjacent property values. L'Anse only has scattered situations of blight, and is generally a well-maintained community. However, with so many older structures and recent economic challenges, it is wise to plan ahead for the remediation of blight.

The Michigan legislature has now provided a common definition of blight utilized in statutes such as Condemnation (1911 PA 236, MCL 213.1), Blighted Area Rehabilitation Act (2006 PA 677, MCL 125.71), Neighborhood Area Improvements Act (2006 PA 676, MCL 125.941), and the Obsolete Property Rehabilitation Act (2000 PA 146, MCL 125.2781). Under this definition, blighted property must meet any of the following criteria:

- Has been declared a public nuisance in accordance with a local housing, building, plumbing, fire, or other related code or ordinance.
- Is an attractive nuisance because of physical condition or use.
- Is a fire hazard or is otherwise dangerous to the safety of persons or property.
- Has had the utilities, plumbing, heating, or sewerage disconnected, destroyed, removed, or rendered ineffective for a period of one year or more so that property is unfit for its intended use.
- Is tax reverted property owned by a municipality, by a county, or by the state. The sale, lease, or transfer of tax reverted property by a municipality, a county, or the state shall not result in the loss to the property of the status as blighted for purposes of the act.
- Is property owned or under the control of a land bank fast track authority under the Land Bank Fast Track Act, 2003 PA 258. The sale, lease, or transfer of tax reverted property by a municipality, a county, or the state shall not result in the loss to the property of the status as blighted for purposes of the act.
- Is improved real property that has remained vacant for five consecutive years and that is not maintained in accordance with applicable local housing or property maintenance codes or ordinances.
- Any property that has code violations posing a severe and immediate health or safety threat and that has not been substantially rehabilitated within one year after the receipt of notice to rehabilitate from the appropriate code enforcement agency or final determination of any appeal, whichever is later.

This common definition should be utilized in local ordinances dealing with dangerous buildings, nuisances, and abandoned structures.

L'Anse should avoid responding to blight problems in a piecemeal fashion with a collection of ineffective, outdated, and unrelated tools and enforcement procedures. A long-term solution requires a coordinated approach, starting with a four-step process. This process includes:

1. Identify and evaluate the specific problems or conditions that are a detriment to the community.
2. Review the municipality's existing tools and enforcement procedures (such as criminal violations, municipal civil infractions, blight violations, etc).
3. Develop goals and an action plan to put in place efficient and coordinated tools and enforcement measures.
4. Implement the plan.

To implement the process, public meetings should be held to begin to identify problems. A map and database should be created to document problem areas. It may be helpful to send out a traveling committee create a video or photo collection of examples of existing blight to assist in public education, without making addresses public or targeting specific properties. This powerful visual tool can help to rally volunteers to address problems and reach consensus solutions.

Step two is to review the Village's existing tools and enforcement procedures and determine the need for updates or coordination. There have been significant changes in enforcement procedures on a statewide basis. For example, municipalities can now classify certain violations of ordinances as municipal civil infractions rather than as criminal offenses. Decriminalizing ordinances gives communities greater flexibility in enforcement of housing and zoning standards, and creates a potential revenue source for the municipality. There has also been an amendment to the eminent domain provisions of the Michigan Constitution. These provisions restricted the ability of public corporations or a state agency to take private property for transfer to a private entity. One exception to this policy is for private property that is selected on grounds of independent public significance or concern, including blight.

Michigan is now governed by a statewide construction code that applies to all municipalities, consisting of sub-codes including the Michigan Building Code, Michigan Residential Code, Michigan Electrical Code, Michigan Plumbing Code, and the Michigan Mechanical Code. L'Anse Village has chosen to administer and enforce the basic construction codes that apply uniformly throughout the state.

A local property maintenance ordinance is the key component of a municipality's housing regulatory tool. A community may also need to adopt ordinances dealing with litter, overgrown weeds, dangerous buildings, or abandoned structures, and may choose to register abandoned structures.

The State Housing Law defines dangerous buildings and provides a guide for enforcing a dangerous building ordinance. It also serves as a guide for registry of rental units. If the community's dangerous building ordinance has not been modified since 2003 reflecting the changes to the State's Housing Law (it appears that L'Anse was last amended in 2002), it should be.

In step three, an action plan is put in place to address blight in a targeted and focused way. Here, specific policy should be addressed and assigned a level and method of enforcement. For example, it should be decided whether the Village or County should enforce the state construction codes, and whether to adopt municipal civil infractions ordinances and establish a municipal civil infractions bureau to process admissions (uncontested) violations. A determination should be made on whether to implement a dangerous building ordinance modeled after the State Housing Law definition, and whether to address abandoned, but not necessarily unsafe, structures. During this step, it is important to include the input of the code enforcement officer and the community.

To implement the plan in step four, public education will help with public "buy-in". Specific tasks should be assigned to appropriate staff to implement the agreed upon policy. It is important to take "before" and "after" photos to report progress and successes. Progress should be re-evaluated every 6 months.

Property Enhancement

Landscaping incentives and site plan review standards are needed to encourage property owners in the commercial/industrial area to buffer large or unornamented structures and reduce the impact of paved surfaces with foundation plantings and landscaped islands or buffer strips. Raised berms can be created as buffers at the perimeter of the large commercial or industrial properties. These berms should require a minimum of 50 percent opacity of plantings and include some evergreen plants to brighten the winter landscape. These landscaped buffers will also provide increased protection for pedestrians from wind during winter months. New parking areas should implement appropriate landscaping requirements in relation to the number of parking spaces provided, avoiding large expanses of impermeable concrete.

Site plan review standards and impact studies should be utilized to ensure that future industrial or large commercial development does not negatively impact the environment or overburden existing infrastructure or public services. If new infrastructure is needed, these should be paid for by the new development. Site plan review standards shall require appropriate buffers from adjacent land uses, whether through appropriate landscaping or newly created park, trail, or open space.

The Village can collaborate with the Michigan State Housing Development Authority (MSHDA) to obtain grants to generate investments in façade improvements, or can establish its own locally-funded façade enhancement program more tailored to local

requirements. Incentives can include assisting building owners with design services, negotiating lower interest rates on loans, or providing cash grants. Some buildings may qualify for Historic Preservation Tax Credits, and the Village could assist in this process.

Transportation Resources

Circulation, utility, and communication infrastructure serves to tie a community together and link it to the rest of the outside world. Local streets and pedestrian networks should provide safe, reliable access to work, shopping, recreation, and residences. As the preferred transportation mode, roads create a path of first impression for the community. Together, these networks create economic opportunity and provide access to markets, goods, and services not found in the community. The quality of these assets reflects and impacts community health and vitality.

Roadway Network

The principle transportation mode in the Village today is vehicular transportation served by the roadway network. Roads serve two basic purposes, the movement of traffic and provision of access to adjoining property. Each of the roads within the Village has a specific traffic capacity, design standard, and design use. By defining the function of roads and their service to the community, the appropriate land uses can be encouraged adjacent to these roads. The design of a road depends principally on its functional classification and the traffic volume it is expected to accommodate at some future time. Different design elements of roads include the number of lanes, width and surfacing of shoulders, width of structures, type of surface, and design speed. It is important to employ access management principles to preserve proper road function and the value of public investment along major roads. The road network in the Village of L'Anse is described in detail below, and shown on the following maps.

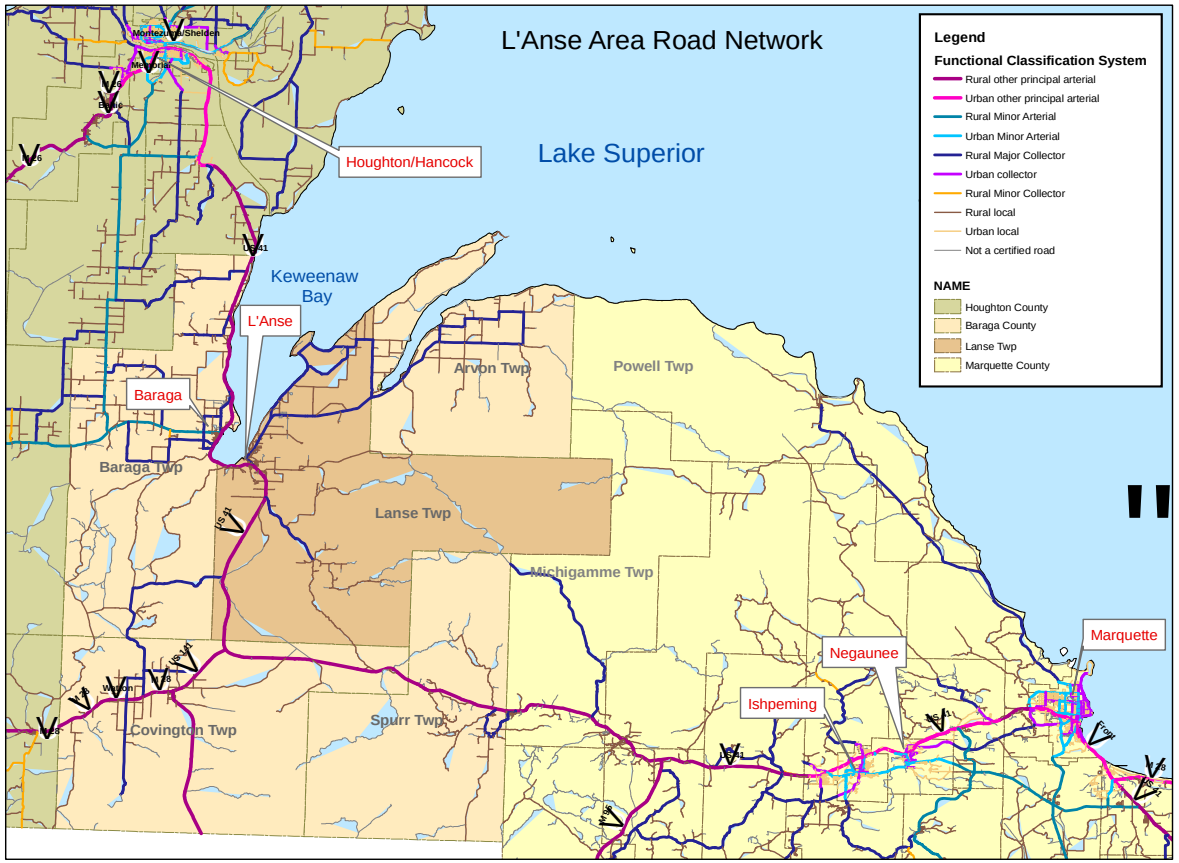
National Functional Classification

Roadways classified as principal arterials accommodate major through-travel movement over long local or regional distances. In the Village of L'Anse, U.S. Highway 41 is classified as a rural principal arterial. This road is eligible for federal aid.

Collectors provide more access to property than arterials, and they also funnel traffic from residential or rural areas to arterials. North Main Street (Broad Street to Jentoft Road), and East Broad Street (US-41 to North Main Street) are classified as rural major collectors and are eligible for federal funds.

Local Roads emphasize access to abutting properties and the collection of traffic for distribution to collector and arterial corridors. This classification applies to the remainder of roadways within the Village. These roads are not eligible for federal aid.

Figure 3-4: L'Anse Area Street Map


L'Anse Area Road Network
Lake Superior
Houghton/Hancock
Keweenaw Bay
L'Anse
Baraga
Baraga Twp
Lanse Twp
Arvon Twp
Powell Twp
Michigamme Twp
Negaunee
Ishpeming
Marquette
Covington Twp
Spurr Twp
Legend
Functional Classification System
Rural other principal arterial
Urban other principal arterial
Rural Minor Arterial
Urban Minor Arterial
Rural Major Collector
Urban collector
Rural Minor Collector
Rural local
Urban local
Not a certified road
NAME
Houghton County
Baraga County
Lanse Twp
Marquette County

Roadway Jurisdiction

Federal Highway System

The only Federal Highway in the Village is US-41, which traverses northwesterly through the Village of L'Anse. The Michigan Department of Transportation facilitates the maintenance and construction by way of Capital Preventative Maintenance funds or Restoration Rehabilitation funds.

State Highway System

There are no State Highways within the Village of L'Anse.

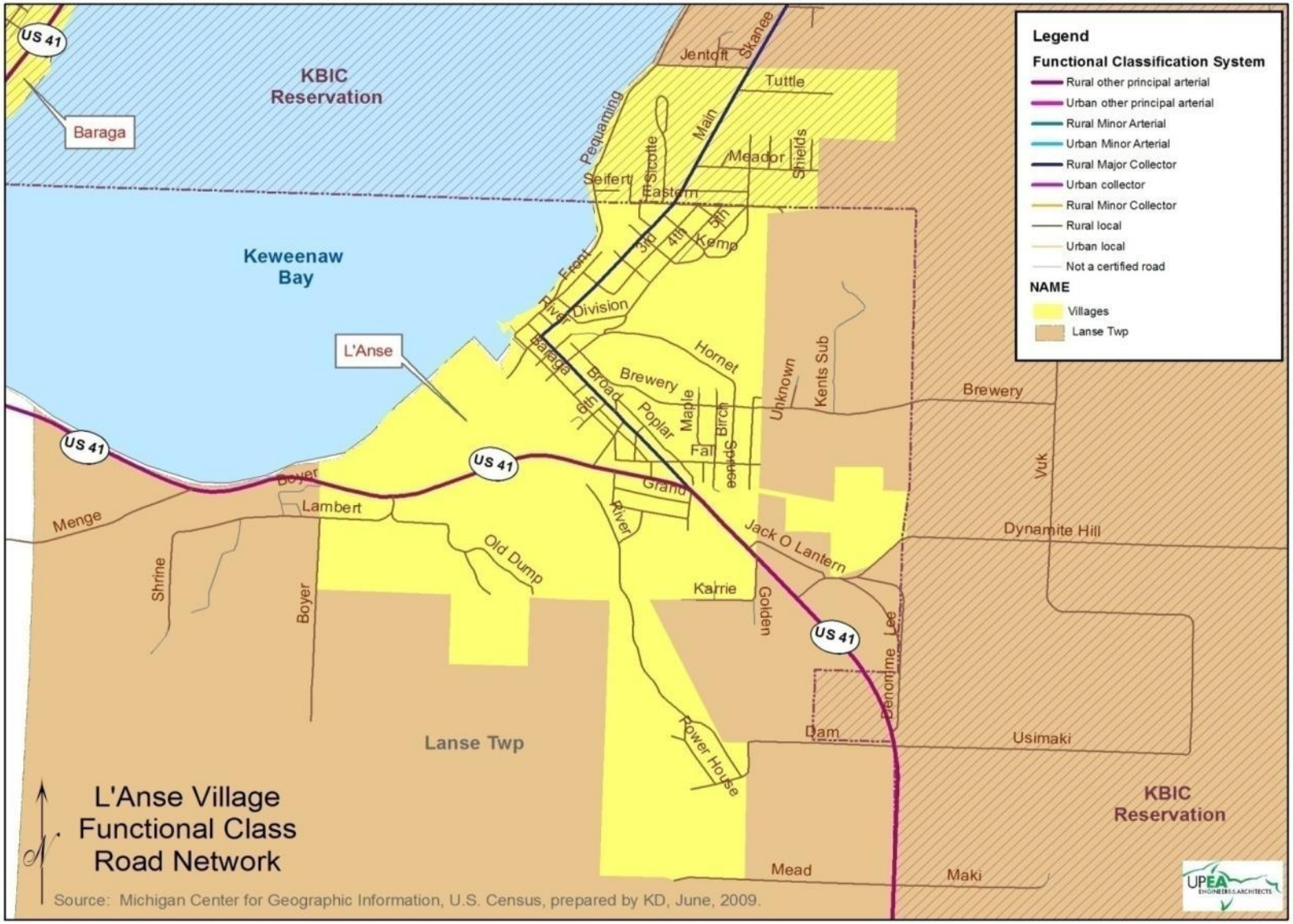
Village Roadway System

The Village designates roadways as major or local in accordance with the State of Michigan Act 51 of 1951. The designation of major is utilized for roadways which provide circulation throughout the Village and connect to neighboring arterials. Streets designated as City Major in the Village of L'Anse include:

E. Broad Street (US41 to N. Main Street)
W. Broad Street (Main Street to S Front Street)
Baraga Avenue (L'Anse Avenue to N Front Street)
L'Anse Avenue (US41 to E. Broad Street)
S. 4th Street (Baraga Avenue to Hornet Way)
S. 3rd Street (Baraga Avenue to dead end East of E. Board Street)
S. Front Street (Baraga Avenue to W. Broad Street)
N. Front Street (W. Broad Street to Pequaming Road)
Pequaming Road (N. front Street to Jentoft Road)
S. Main Street (Baraga Avenue to E. Broad Street)
N Main Street (E. Broad Street to Jentoft Road)
River Street (N. Main Street to N. Front Street)
W. Eastern Avenue (Lakeside Avenue to N. Main Street)

All other streets in the village are designated as local. Within the Village, local roads serve as access and minor collector roadways. An extensive local road network is developed within the urban area of the village. Village road funding for road maintenance is provided by the ACT 51 Michigan Transportation Fund. The maintenance activities are provided by the Village public works department.

Figure 3-5: Village of L'Anse Street Classification



Current Road Conditions

PASER Rating System

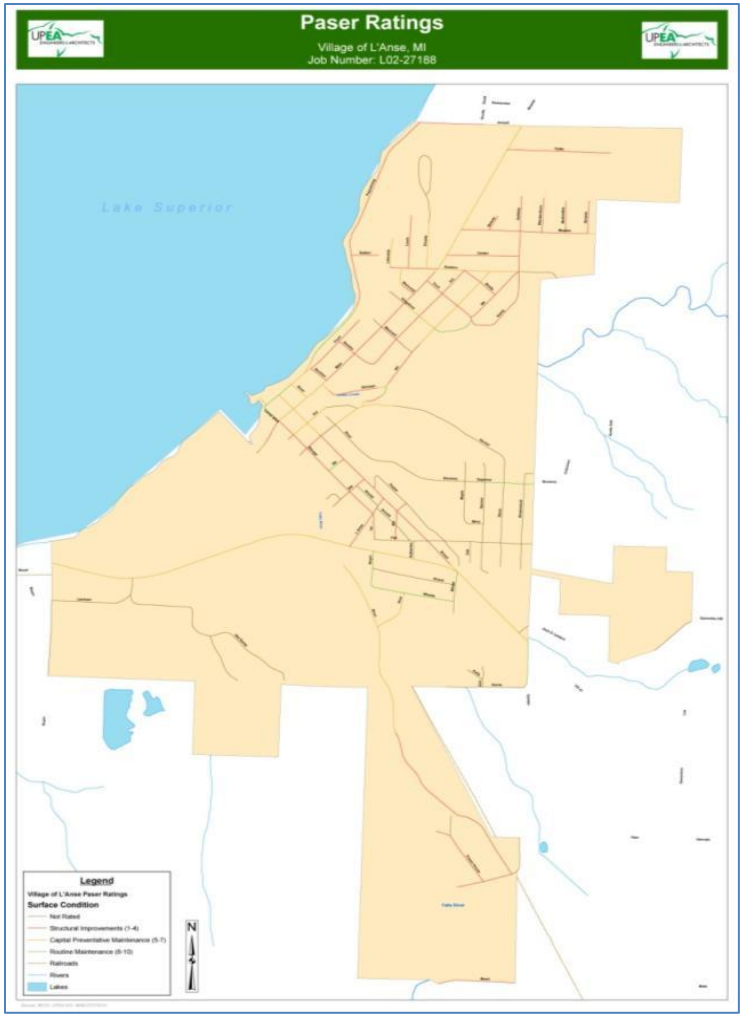
The first step in the resource allocation process is to assess current infrastructure conditions. The Baraga County Road Commission unitizes Pavement Surface Evaluation and Rating (PASER) inventory and asset management system for assessing the condition of National Functional System major streets. A Rural Task Force reviews project submittals. Most roads in the Village were evaluated in 2009.

PASER is a visual survey method developed by the University of Wisconsin Transportation Information Center to evaluate road conditions. Ten separate ratings are used to evaluate the surface distress of the pavement based on pavement material and types of deterioration present. The ratings are then grouped into three categories based on the type of work required, including Routine Maintenance, Capital Preventive Maintenance, and Structural Improvement.

Routine Maintenance includes regularly scheduled preventative treatments such as street sweeping, drainage clearing, gravel shoulder grading, and sealing of tight cracks. PASER ratings 8-10 are included in this category which includes newly constructed or recently improved roads requiring little or no maintenance. The roadways in the Village that received a rating of 8-10 include:

- Boyer Road
- Woods Road
- East Kingsford Avenue
- South Front Street (from East Baraga Avenue to West River Street)

Figure 3-6: PASER ratings Map, Village of



Capital Preventive Maintenance consists of planned treatments applied to existing roadways to retard further deterioration, maintain or improve function, and correct distress. PASER ratings 5-7 are included in this category which contains roads with good structural support with surface deterioration, such as cracks over ¼ inch. The roadways in the Village that received a rating of 5-7 include:

- Falls River Road
- US- 41
- West Broad Street
- West River Street
- West Kingsford Avenue (from North Main Street to 4th Street)
- East Eastern Avenue
- Skanee Road (from East Eastern Avenue north to the Village limit)
- Sicotte Avenue
- Lakeside Avenue
- North 4th Street (from East Mesnard Street to East Eastern Avenue)
- South Main Street (from East Baraga Avenue to West Division Street)
- Hornet Way (from East River Street to North 4th Avenue)

Roads rated as needing Structural Improvement include those in need of repair to improve the structural integrity of the pavement. PASER ratings 1-4 are included in this category. Typical problems include rutting greater than ½ inch deep, cracking in the wheel path, severe block cracking, alligator cracking, and cracks with severe erosion. These roads may need major rehabilitation or reconstruction. The roadways in the Village that received a rating of 1-4 include:

- East River Road
- L'Anse Avenue
- South 6th Street
- South Main Street
- South 4th Street (from East Baraga Avenue to East River Road)
- South 3rd Street (from East Baraga Avenue South to the end)
- 8th Street
- East Baraga Avenue
- East Broad Street

- East Division Street
- West Division Street
- West Bendry Street
- East Mesnard Street
- East Ford Avenue
- Brady Avenue
- West Eastern Avenue
- Seifert Avenue
- Centre Street
- Meador Street
- Tuttle Avenue
- Jentoft Road
- North Front Street (from West Division Street North)
- Bay Shore Road
- North Main Street (from West Division Street to just north of East Ford Avenue)
- North 5th Street
- Kemp Street
- Louis Avenue
- Seavoy Avenue
- Halliday Street
- Blankenhorn Street
- McKindles Avenue
- Shields Street

Traffic Data

In 2008 the Baraga County Road Commission (BCRC) collected and analyzed traffic data for almost all of the roadways in the Village of L'Anse. The BCRC uses Jamar Technologies Automatic Traffic Data Recorders to record many types of traffic data. Including traffic volume, traffic speed, average daily traffic, axle classification, and following distance classification. The traffic recorders, consists of a collection unit and two 50 foot rubber air hoses. These air hoses are attached to the collector and ran across the roadway eight feet apart.

As a vehicle passes over the air hoses, compressed air is sent back to the data collector recording information. After a one week, in most cases, of data collection, the data is analyzed.

The data gathered from the traffic studies serves many important purposes. It can be used to prioritize future reconstruction and maintenance projects. The data can also be used for Michigan Act 51 classification, National Functional classification and expenditure justification.

Average Daily Traffic values range from 15 on Katherine Street to 7,089 vehicles on Broad Street. Roadways with the most traffic are located Downtown on North Main Street leading north out of town and on Broad Street, one of the main corridors from US-41 to downtown.

Road Network Recommendations

Mobility

Mobility is the ability to move through an area. Mobility is impacted by connectivity. Street connectivity can be defined as the quantity and quality of connections in the street network. A traditional rectilinear street grid, as is available in most of L'Anse, provides relatively direct connections and multiple routes and thus has high connectivity. In contrast, the curvilinear networks dominated by cul-de-sacs that are more typical of modern subdivisions often provide relatively indirect connections and few routes and thus have low connectivity. Street connectivity has important implications for travel choices and emergency access. Longer distances reduce the likelihood that an individual will travel to that destination. Networks with low connectivity discourage walking and biking, thereby increasing vehicle travel and reducing physical activity. Low connectivity contributes to longer emergency response times.

L'Anse should maintain the connectivity level of its traditional grid street pattern into the future as much as possible. This can be done by requiring subdivisions to have multiple access points, requiring street stubs for future connections, creating standards for bicycle and pedestrian connections, utilizing internal access through adjacent development, and avoiding cul-de-sacs or dead-end streets.

Mobility is improved by adding transportation mode options. It is recommended that the Village complete a Non-Motorized Transportation Plan to prioritize needs within the community. The plan could be utilized to recommend improvements to the pedestrian and bicycle accommodations for road reconstruction projects, and to design a safe pedestrian and bicycle transportation network throughout the Village. This plan can include projects such as a hiking trails map, lakeshore multi-use path, as well as bicycle and pedestrian transportation projects. Having a comprehensive bicycle and pedestrian plan can make more funding sources available for these types of projects.

New roads may be needed to enhance mobility. During the planning session several requests were made for an additional street connection from the Downtown commercial district west to US-41 along the bay. The improvement would provide a local west entrance into L'Anse Village. There have also been suggestions for a new road for logging trucks coming from the north to bypass downtown and go directly to US-41.

Maintenance and Administration of the Network

It is recommended the Village implement an evaluation of road conditions by utilizing an asset management program. The training and software are available through the Michigan Technological University's Local Technical Assistance Program (LTAP) services. Educational classes on rating road are provided annually by the LTAP. The Village would be able to forecast maintenance requirements and prioritize construction projects. An asset based management system will also assist in estimating budgets for maintenance of the street system. Expenditures for crack sealing, sealcoats, overlays, rehabilitations and reconstructions can be forecasted.

The Baraga County Road Commission has completed traffic counts on all streets within the Village in 2008. It is recommended that this be continued on a five year cycle. The traffic accident information and street regulation signs can also be inventoried in "Road Soft" software.

Managing access along important roadways is important to preserving roadway function, safety, and capacity. Land division and access along major roads should be managed and limited to prevent strip development. Frontage or other alternate access roads should be utilized when possible. Access management standards should be incorporated into the zoning ordinance.

Enhancements

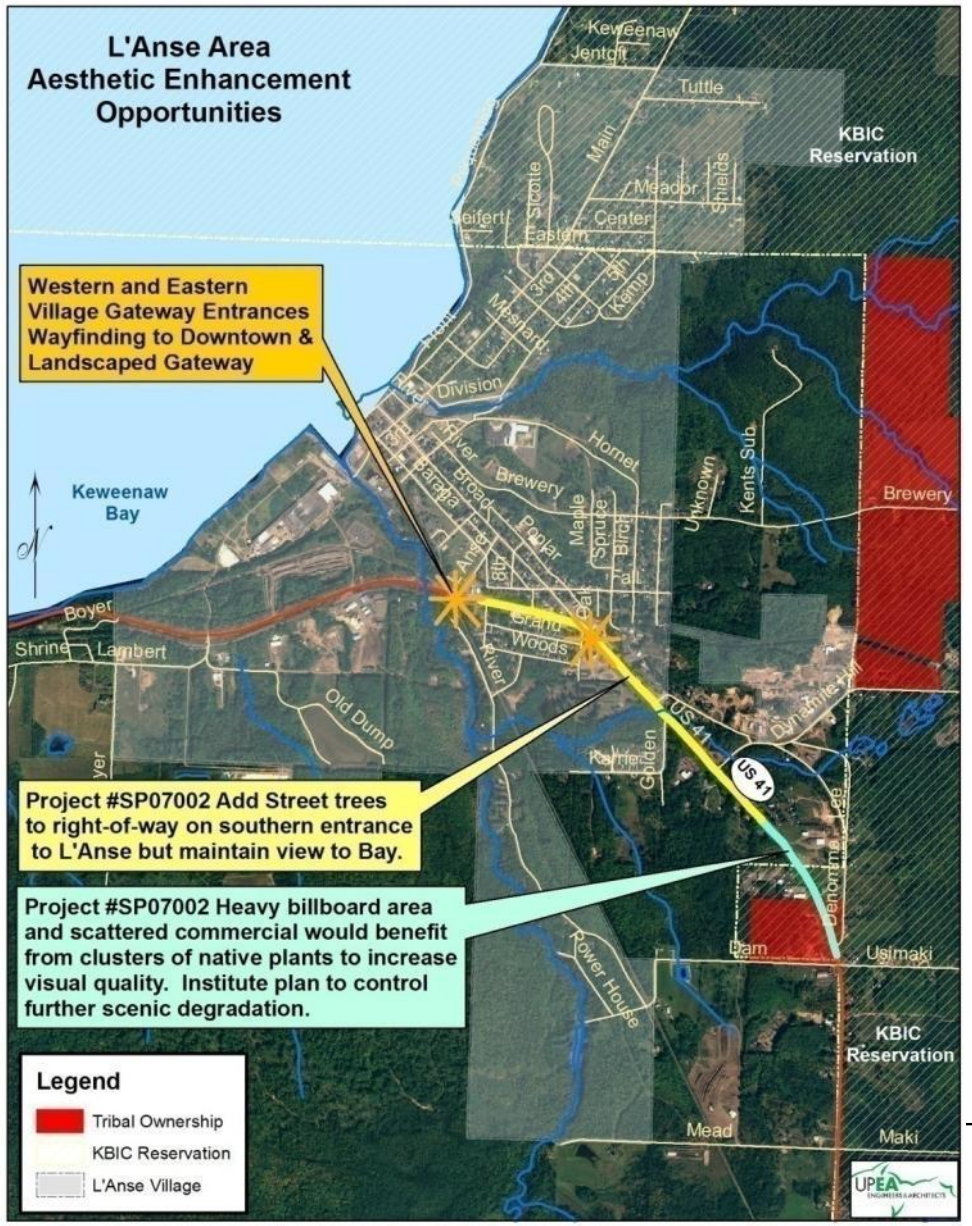
L'Anse Village would benefit from implementing alternate modes of transportation planning into road improvement projects. Of primary interest is the complete reconstruction of Main and Broad Streets, which were built in the 1920's and have a deteriorating road bed. Pedestrian infrastructure and street amenities should be added when this project is implemented. This is consistent with the Michigan Pedestrian and Bicycle Safety Action Plan as published in April of 2006 by the Governor's Traffic Safety Advisory Commission.

Michigan Department of Transportation enhancement grant funding may be a potential source of funding for improvements for streetscape implementation on US-41. Suggested improvements are shown in Figure 3-7.

Within the Downtown, the Village of L'Anse should continue its efforts to redefine the commercial district and create a unique identity with enhanced streetscaping projects. Improvements should implement energy efficient, dark sky compliant, pedestrian-scale lighting; permeable or recycled pavement material; and native landscaping whenever possible. Edible landscaping such as berry bushes or nut trees can provide a community food source and encourage socialization. New development should be required to incorporate these amenities.

Signage plays an important role in allowing people to safely navigate the roadway network and easily locate destinations. Signage also impacts community aesthetics. The Village of L'Anse should implement sign regulations to

Figure 3-7: L'Anse corridor streetscape opportunities



Source: MDOT, Michigan Center for Geographic Information, U.S. Census, prepared by KD, June 2009.

ensure compatibility in size, placement, and materials of signs in both the Downtown and along the highway corridor. This will create a safer and more aesthetically pleasing commercial center.

During the planning session several requests were made for an additional directional and informational signage within the community. The implementation of a community-wide way finding signage and entrance signing is recommended, especially from the direction of Houghton. Additionally, coordinated wayfinding signage should be created to direct travelers to the Downtown, medical services, recreational opportunities, and Village, Township, and County government.

The community also identified a need to develop an attractive western community gateway utilizing landscaping and signage to create a community focal point and identity in the vicinity of L'Anse Avenue.

Above: Wayfinding signs
Below: Landscaped Parking

Parking lots have long been ignored for enhancement opportunities. Standards for large parking areas should incorporate landscaped areas and trees to improve stormwater management practices, reduce strain on the stormwater system, and improve visual impact. Care should be taken to design these areas to accommodate snow storage while protecting plants. When possible, Downtown parking areas should include landscaping on the pedestrian edge as well as a short wall or fence of iron or masonry materials to buffer vehicular areas from pedestrian areas, or parking should be placed to the rear or sides of buildings to preserve interaction between pedestrians and store fronts. Additionally, parking can be reduced by utilizing shared parking standards for adjacent compatible uses. Adjacent parking lots should be connected when possible to facilitate easy access without returning to the highway corridor.

Aviation

The Village of L'Anse currently does not have a commercial airport servicing the Village. The nearest commercial airport to the Village is Houghton County Memorial Airport. The Village also has a privately owned airport, Baraga Airport.

Houghton County Memorial Airport

The Houghton County Memorial Airport is located in Hancock, Michigan approximately 42 miles northwest of the Village via U.S. Highway 41. The Airport is owned and operated by Houghton County. The

Airport consists of two landing runways, a terminal building, and hangers for general aviation. The Airport is serviced by the commercial United Airlines, with daily flights to and from Chicago.. The Airport also is serviced with seasonal flights by Royale Air Service with flights by reservation to Isle Royal National Park. The Airport is accessed by way of State Highway US 41. Parking is located adjacent to the general aviation airport terminal.

Baraga Airport

Baraga airport is a privately owned airport open to the public. The airport has one grass runway and tie downs are available. The airport is open seasonally. The airport is located at 4772 Cemetery Road (M-38) Baraga, Michigan.

Rail Service

The Canadian National Railway operates a freight line which travels through the village parallel to the US-41 corridor. Spur railway lines service the industrial park, L"Anse Warden Plant, and the CertainTeed plant. It is important to preserve rail service for a more sustainable future. This valuable infrastructure may be a key to community survival in a changed future.

Public Transit

The Baragaland Senior Center presently operates a bus run on Tuesdays and Thursdays. The bus delivers passengers from their homes to the senior center and back. Services are also provided by request for anyone who is handicapped and needs medical care. Destination trips to Houghton and Marquette are provided monthly, but only if enough passengers are registered for the trip.

Indian Trails operates a commercial bus route and services passengers with connections to Iron Wood, Michigan; Green Bay, Wisconsin; Chicago, Illinois; Saint Ignace, Michigan; and the majority of the Lower Peninsula of Michigan. There is a private cab service operating in the L'Anse area as well.

The community should continue support and promote the present bus system provided by Baragaland Senior Center. However, it is advised that the community address the transportation needs of youth and other residents as well.

Harbor Facilities

The CertainTeed plant in L'Anse has access to commercial navigation in Keweenaw Bay. The L'Anse Village Marina serves as a point of refuge for recreational water craft on Keweenaw Bay. There is also a dock for the L'Anse Warden Electric plant, however at the time of this plan, other uses of this dock are not clear. Port facilities may be essential for a sustainable community in the future, so L'Anse should enhance and preserve this valuable asset.

Non-Motorized Transportation

The primary non-motorized transportation modes are bicycling and walking. Quality-of-life and the economy have been a recurring theme in the public input for this plan, and walking and bicycling are tightly linked to quality-of-life and economic development strategies. In general, communities that are walkable and bikeable tend to encourage active healthy lifestyles, a livelier social environment, and more vibrant downtowns. Non-motorized transportation is also linked to reduced greenhouse gas emissions, lower levels of pollution, less traffic congestion, and a healthier environment. Walkable communities are valued by those who either can't or don't wish to depend on automobile transportation. These communities support greater levels of independence in mobility options for senior citizens, youth, and lower income people. Because of the positive effects that walking and bicycling have on recreation, fitness, transportation, and the environment, these transportation modes are valuable community assets. The differences in the needs and desires of pedestrians and bicyclists require a variety of facility types to accommodate them safely and enjoyably.

Walkable / bikeable communities encourage healthy lifestyles.

Pedestrian Infrastructure

Whether building new infrastructure or renovating existing places, it should always be assumed that people will walk, and plans should be made to accommodate pedestrians. There are many reasons people walk; to go to the local businesses, to take their children to the local park, to visit neighbors, for exercise, and to spent time with family. However, people will not walk unless they feel safe. Cracked and broken sidewalks are dangerous or uncomfortable for senior citizens, people pushing children in strollers, skateboarders, vision challenged people, and even bicyclists. They may be impossible for the handicapped to navigate. If suitable sidewalks aren't provided, people will improvise and use roadways or create informal paths.

Crosswalks are also a critical part of the pedestrian network. It is that part of the roadway designated for the use of pedestrians in crossing the street. Crosswalks may be either marked or unmarked, but are most effective when motorists can identify them easily. Pedestrians, especially those with vision constraints, benefit from clearly marked crosswalks. Medians and islands can help pedestrians

cross streets by providing refuge areas physically separated from the automobile path of travel. They are especially useful at irregularly shaped intersections and on busy streets (they allow pedestrians to cross during smaller gaps in traffic).

Due to the broad nature of a master plan, an in-depth analysis of specific existing conditions was not performed for the entire L'Anse pedestrian system. The Village should pursue funding support to create a Non-Motorized Transportation Plan that would identify specific projects and phases in a systems approach. L'Anse fortunately does have a traditional development pattern that supports an excellent pedestrian network.

Throughout the planning process, one major barrier to north-south pedestrian movement was identified. People living on the south side of US-41 do not have a safe crossing to access Sacred Heart School, the Downtown, or any of the businesses along the north side of US-41. It was also identified that there is a lack of sidewalks in the residential area on the south side of US-41 along Boyer Street, Grand Avenue, Woods Avenue and Winter Street. There is also a lack of sidewalks in the residential area north of US-41 and east of Broad Street. The roadways in this area include Superior Street, Maple Street, Spruce Street, North Birch Street, South Greenwood Street and East Fall Street. L'Anse should work with MDOT to determine if a marked pedestrian crossing (and perhaps a median or island) can safely be constructed near the south neighborhoods to provide access to key community destinations.

The older neighborhoods tend to have sidewalks; however many of the sidewalks are in need of maintenance and curb cut updates. In many cases there is little to no separation between the roadway and the sidewalk. Many curb-cuts throughout the Village should be upgraded to meet the standards set by the Americans with Disabilities Act. The Village has started to upgrade sidewalks and other pedestrian facilities in high priority areas including Downtown and the lake shore. Sidewalk inspections and scheduled repairs should be a part of annual maintenance operations. The Village may need to fund sidewalk maintenance and repair through special assessments.

Creating walkable communities can be difficult in areas that are oriented to the automobile. For many years, development has been oriented to vehicular travel. In many cases, the infrastructure that made communities sustainable such as neighborhood schools and stores has disappeared. L'Anse is fortunate in that it has largely avoided the trend cycles that led to homogenous, auto-oriented, isolated neighborhoods in favor of maintaining traditional neighborhood patterns. As the population of the Village ages, and the Village seeks to attract new residents and businesses, it is vitally important to continue to increase the walkability of the Village.

Bicycle Infrastructure

On-street bikeways bring enormous benefits to both the cycling and non-cycling public. Bikeways create opportunities to incorporate exercise. They use public dollars efficiently by reducing road maintenance costs and increasing the carrying capacity of the transportation system. They improve safety for all users; bicyclists feel they have a safe space on the road and tend to be more law-abiding, and motorists

are placed at greater ease knowing where bicyclists are apt to be and have greater awareness of the right for bicyclists to use the road. Bicycle lanes are typically provided on collector and arterial streets, such as Main or Broad Streets in L'Anse, or on US-41. They can be implemented by narrowing existing travel lanes, removing a travel lane, removing parking, and widening a roadway or paving a shoulder. These varying needs must be weighed carefully.

The most efficient way to incorporate bikeways is to include them as part of road reconstruction projects, or as a restriping of the roadway with bicycle lanes during routine resurfacing. Design of bikeways must consider:

- Sight lines and topography
- Lane widths for all travel modes
- Intersection design
- Signing, markings, and striping
- Design of drainage inlet grates
- Pavement conditions
- Specific design for pinch points, driveways, railroad crossings, and other challenging areas
- Integration with off-street shared-use trails/paths

If bicycle lanes are deemed unfeasible, alternative improvements may be substituted, such as providing a bicycle lane in only one direction (such as on an uphill direction on a steep slope), using shared lane markings, or directing cyclists to an alternative bikeway. An extra-wide curb lane can give extra room for bicycle operation if there is not enough room for a bicycle lane.

L'Anse Village would benefit from implementing alternate modes of transportation planning into road improvement projects. Pedestrian infrastructure and street amenities could be added when this project is implemented. For more information see the Michigan Pedestrian and Bicycle Safety Action Plan, published in April of 2006 by the Governor's Traffic Safety Advisory Commission.

Multi-Use Trails

L'Anse residents and economic developers have expressed a desire to create a multi-use path along the lakeshore to take advantage of scenic views and to provide a valuable and unique recreational opportunity. This path would also provide an important transportation option for workers moving between Baraga and L'Anse. Integrated trail systems accommodate a range of users including walkers, joggers, hikers, bicyclists, and inline skaters. Regional trail systems may also accommodate mountain bikes, equestrian, cross-country skiing, dog sledding, skijoring, and off-leash dog trails. L'Anse should collaborate on regional trail projects and be prepared to provide valuable links in the overall system. A well-designed trail can become a destination in itself, especially if they feature scenic views, natural areas, and other natural amenities. This is a valuable economic development opportunity for L'Anse. A multi-use trail has been planned from Zeba to Sand Point around the head of the bay and through the Village of L'Anse. An initiative of the Keweenaw Bay Indian Community (KBIC), this trail will be constructed in phases beginning in the summer of 2017.

Asphalt/bituminous surfaces can be used in most climates. Crushed compacted aggregate surfacing is also acceptable for less traveled trails or those in a natural setting. Concrete is not as well suited in climates with freeze/thaw cycles. Typical widths are 8 to 10 feet. Trail gradients should average less than 5 percent to be considered an accessible trail, with 3 percent preferred. Eight to 10 percent gradients are acceptable for moderate distances. Grades in excess of 10 percent should be avoided. Overhead clearance should be a minimum of 10 feet. A shoulder area of grass or compacted gravel should be a minimum of 2 feet on each side. Attention must be paid to safe roadway crossings, general public safety, and accommodation of maintenance vehicles. Trail amenities include benches, signage, picnic areas, drinking fountains, and emergency shelters. Trail lighting should be provided at intersections, but lighting of the entire trail may increase night utilization, especially for cross-country skiing. Nature trails should be kept simple and intimate in context with the setting. The difficulty may vary according to terrain.

Example of winter use of a multi-use trail.

Complete Streets

The Village of L'Anse embraces *Complete Streets* principles and will implement them in all street projects. Streets serve many functions, including:

- Connecting various parts of the community

- Providing surface transportation (accommodating all modes of transportation including pedestrians, bicyclists, transit, motor vehicles, emergency services, etc.)
- Accommodating public access to destinations
- Providing space for utilities and other public infrastructure hidden underground
- Helping to define a place and create a sense of place. For example, streets provide a place for people to interact as venue for parties, parades and other community events.

Due to the varied functions of streets, the National Complete Streets Coalition has defined a *Complete Street* as a street designed and operated so they work for all users; pedestrians, bicyclists, motorists and transit riders of all ages and abilities. Communities that adopt *Complete Streets* policies are asking transportation planners and engineers to consistently design and alter the right-of-way with all users in mind. As previously stated, quality-of-life is very important to the residents of the Village. Designing and building *Complete Streets* fosters livable communities and provides many benefits to the community such as:

- Providing children with opportunities to reach nearby destinations in a safe and efficient environment
- Encouraging healthy and active lifestyles through wide, functional, and attractive sidewalks and well-defined bicycle routes consistent with the context of the community
- Allowing everyone, especially people with disabilities and the elderly, to reach destinations and travel around the community
- Reducing pedestrian risk by as much as 28 percent by implementing *Complete Streets* design elements such as raised medians, sidewalks, and other traffic-calming measures (according to the National Complete Streets Coalition)
- Promoting a cleaner environment. The *Complete Streets* approach encourages people to walk or bicycle to their destinations around the community, which may help reduce vehicle trips. Many *Complete Street* designs also include increased green space along the roadway which also helps the environment

Utility Infrastructure

Utilities and community facilities provide the support and foundation for community activity and economic growth. Utilities include the storm water systems, public water supply, sanitary sewer system, and solid waste management system. The efficient operation of these facilities affects the health, safety, and welfare of the residents of the Village of L'Anse. They also affect the quality of the natural environment and land use decisions, which in turn impacts the economy.

Storm Water Management Systems

Land use has an impact on the basic water balance of an area. Total precipitation is divided into three components, including evapotranspiration, infiltration, and runoff. The quantity of each depends on the amount of precipitation, climate, vegetative cover, soils,

land slope, amount of impervious area, and the characteristics of precipitation events such as intensity of rainfall. As land is altered from less intensive to more intensive uses, impervious cover increases, and the relative balance of these three variables is changed. The most dramatic effect is that runoff volume increases and infiltration decreases. The consequence of more runoff occurring more frequently is an acceleration of overland and channel erosion, increased pollutant washoff from the land to receiving waters, and increased flooding frequency. Decreased infiltration reduces the amount of groundwater recharge and leads to a loss of total water volume to supply streams, wetlands, ponds, and lakes during dry weather.

The Falls River and Linden Creek flow through the Village and discharge into Keweenaw Bay. The Village of L'Anse obtains its drinking water from Keweenaw Bay, and the rivers and Bay are routinely fished. For this reason, it is vitally important to manage stormwater to protect water quality. Land uses that are of particular concern include vehicle salvage yards and recycling facilities, vehicle repair and refueling stations, vehicle and equipment cleaning facilities, fleet storage areas, marina service and maintenance facilities, public works storage areas, and certain industrial sites that manufacture, store, or transport toxic soluble pollutants.

Traditional stormwater management involves the conveyance of water from one point to another and the control of increased peak rates of runoff associated with land use alteration. In L'Anse, the urban section roadways containing curb and gutter are provided with storm sewer systems for drainage, including swales, ditches, inlets, piping, and discharge areas. Discharge is ultimately into Keweenaw Bay. A comprehensive map of the storm sewer system within the Village is not available. However, individual installation project records of the storm sewer system are available. A comprehensive storm sewer map should be compiled from available record drawing and additional field data obtained. The Village should consider televising the storm sewers to obtain the size, pipe composition, and physical conditions of the existing lines. A preventive maintenance plan, schedule, and budget should be developed for the storm water system.

Above: Bio-retention cell.
Below: Daylighted stream with riparian buffer in an industrial area.

Low impact development best management practices may provide an environmentally responsible way for the Village to manage stormwater runoff with future development, used alone or in combination with existing stormwater systems as conditions merit. Stormwater runoff is rainfall or snowmelt that runs off the land and is released into rivers and lakes. In a natural woodland or meadow, most of the annual rainfall soaks into the soil, and then much of it is released back into the atmosphere through plants. Water that continues to percolate downward through the soil reaches the water table and moves slowly down gradient, ultimately providing baseflow for streams and rivers, lakes, and wetlands. However, impervious surfaces (such as roads, buildings, and parking areas) and land compaction associated with land development prevent water absorption and create much higher runoff than in natural conditions. As plants are removed, less moisture is released into the atmosphere, and there is greater runoff and less groundwater recharge. These changes in the water cycle dramatically affect water resources. There may be:

- Increased flooding and property damage
- Degradation of stream channels and habitat
- Less groundwater recharge and dry weather flow
- Impaired water quality
- Increased water temperature
- Decreased water recreational opportunities

After buffer planting.

Impervious surfaces cause pollutants such as hydrocarbons and trace metals from vehicles, chlorides from road salt, and nutrients from fertilizer and grass clippings left on streets and sidewalks to negatively impact lakes and streams. Runoff from warmed surfaces adversely impacts aquatic life that requires cold water conditions (e.g. trout that inhabit the Falls River and Linden Creek).

Low impact development is a technique that uses a basic principle modeled after nature in managing rainfall by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to its source. This is accomplished not through large, costly facilities located at the bottom of drainage areas, but through small, cost-effective landscape features located at the lot level. Almost all components of the urban environment have the potential to provide better management of stormwater—this includes not only open space, but also rooftops, streetscapes, parking lots, sidewalks, and medians. These techniques can be incorporated along transportation corridors, at time of urban redevelopment, and in new development. The goal is to filter stormwater runoff with vegetation before it moves into water bodies. Care must be taken to appropriately design and maintain these systems so that they work in an appropriate manner, and cold climate conditions must also be managed so that proper

filtration occurs. In cold climates, the large quantities of sand and salt used to treat roadways may limit groundwater recharge techniques such as infiltration, vegetative swales, bioretention facilities, filter strips, aquatic buffers, etc. It should be cautioned that these techniques are not always appropriate if there is any risk that contaminants in runoff will not be filtered, and will, instead, penetrate directly to the water table. Injection well and subsurface fluid distribution systems, in particular, require caution and, in most cases, an EPA permit, especially with the presence of soils with poor percolation rates. Pretreatment may be necessary with higher risk land uses, and special care must be taken in the wellhead protection zones.

Stormwater management techniques are designed around two goals: protecting and restoring natural areas, and designing development that minimizes imperviousness and maximizes permeability. Some techniques include preserving open space, daylighting creeks and restoring wetlands, protecting and planting trees, clustering development to maximize unpaved areas, using pervious paving materials, minimizing street widths, reducing the area of parking lots, designing recreation areas to hold runoff, and directing runoff from pavement and buildings to vegetation-lined channels.

Above-ground or shallow infiltration systems, such as vegetated swales, rain gardens, filter strips, bio-retention areas, oil/water separators, and constructed wetlands, allow more time for contaminates to be filtered through the soil. Many of these systems, planted with salt-resistant vegetation, can serve as snow retention areas in the winter, although salt should be minimized near wetlands. Riparian buffers are vegetated areas next to water resources that protect them from nonpoint source pollution and provide bank stabilization and aquatic and wildlife habitat. Design is important, because runoff must be sufficiently slowed to allow sediment and pollutants to settle out. L'Anse should protect and enhance riparian buffers along the Falls River and Linden Creek to protect water quality, utilizing hardy native plants when possible.

Because the Village depends on the water quality of Keweenaw Bay, a comprehensive stormwater management plan should be developed. Coastal zone funding may be available to assist in this effort. Good stormwater management techniques should be incorporated into the zoning ordinance, including adjustments to parking standards, landscaping standards, and development standards.

Public Water Supply

The public water supply system consists of a supply and distribution system, described below. There is currently no comprehensive plan for water system improvements, although a map of the entire system exists. Some improvements to address low pressure areas have been identified or are known by various people, but problems have not been addressed in a comprehensive plan or on a map.

Supply

The Village receives its potable water supply from Keweenaw Bay, Lake Superior. The Village Water Treatment Plant constructed in 1994 is located on the northwest side of the Village adjacent to Keweenaw Bay and draws raw water from the Bay which is treated at the water filtration plant and pumped into the Village water system. Potable water is available in the residential, commercial and industrial areas of the developed area of L'Anse Village and adjacent areas of L'Anse Township. The water in the system is chlorinated at the plant prior to entering the distribution system. The water presently is not treated with fluoride. The Village owns and operates the water plant. There are two licensed operators who hold state issued F-3 operator licenses.

Distribution

Water mains within the system consist of ductile iron pipe and older mains are sand cast iron. Water service lateral lines consist of type K copper and galvanized iron pipe. The Village replaces galvanized iron pipe water laterals with copper piping in conjunction with road reconstruction projects. The village also replaces galvanized iron pipe water services with copper piping when home owners upgrade their portion of the water services. The soils in the community are predominately clay, and in the downtown area consist of pit run gravel deposits.

There are numerous dead end mains within the existing distribution system. The Village performs routine flushing annually and more frequently on all dead end mains. The Village does not have a valve exercising program at this time. There is no water system master plan on file at present. The distribution crew consists of one licensed operator who holds a state issued S-3 license.

The operating pressures and fire flows are fair to good with in the distribution system. There are two 200,000 gallon water storage tanks, one concrete tank and one steel tank. The concrete tank was erected in approximately 1994 and the steel tank was erected in the 1950s. The water distribution system consists of three areas in the community. A distribution area is fed by each tank and a small distribution area is operated with water booster station.

Pipe material for new water main extensions and replacements consist of installations of ductile iron pipe water mains with Type K copper water service lines. Permits and design submittal are required from Michigan Department of Environmental Quality for water distribution system replacement and expansions.

Several enhancements to the water system are suggested. A water system master plan and a five year capital improvement plan should be developed. As part of the plan, a hydraulic model should be created to determine improvements to capacity and pressure. Dead-end mains should be eliminated by looping the existing water main system when possible. The Village should implement a water valve exercise schedule, which could be performed concurrent with the water main flushing program. Hydrant flow and water system residual pressure

records should be maintained for future ISO insurance rating documentation. The present water system map for the Village should be updated annually with the records from construction projects completed.

Private Wells

Areas outside of the Village public water supply distribution area must be serviced by private wells. The Baraga County Health Department requires a permit to install a well system.

Sanitary Sewer System

The sanitary sewer system consists of a collection and treatment system as described below.

Collection System

A comprehensive wastewater collection and treatment system study was completed in 2008. The report evaluates the existing sewer system and recommends a prioritized plan for improvements to the collection system, plant and lift stations. Sanitary sewers service the residential, commercial and industrial area of the developed area of L'Anse Village. A majority of the sewers were televised and recommendations for rehabilitation and replacement of sewers are included in the comprehensive plan.

Treatment Plant

The L'Anse wastewater treatment facility was built in 1958**,** upgraded in 1980 and 2002. The plant is an activated sludge process plant for treatment of non-industrial sanitary wastewater with a design flow of 0.72 mgd. The plant normally meets its treatment parameters but is at risk of exceeding these parameters during high flows such as wet weather or spring melt periods. The plant receives approximately half of its flow from lift station #1 which, when energized, increases incoming plant flow by a factor of approximately three. The sanitary sewer plant consists of primary and secondary treatment of wastewater. Process equipment includes a fine screen, grit separator, four primary clarifiers, four aeration basins, two final clarifiers, chlorine disinfection and bisulfate de-chlorination. Recommendations for plant improvements and lift station rehabilitation are included in the 2008 comprehensive plan. Permits for construction are required from the Michigan Department of Environmental Quality for sewer collection system and treatment plant construction and modification projects. Improvements are proceeding with this system.

Several enhancements are recommended for the sanitary sewer system. The Village should continue to implement a sewer line cleaning maintenance program. Recommendations for plant improvements, collection system improvements and lift station rehabilitation are include in the 2008 comprehensive plan and should be utilized for future planning of system upgrades. The present treatment operations are operating at 70 percent of capacity. Future development expansion of large acreage industrial, commercial or residential property will need to be evaluated for impacts on the treatment process. The Township is presently performing an evaluation of the plant and system

for potential industrial expansion. The Village should annually update the sanitary system comprehensive map with the records from construction projects completed.

Economic Development and the Built Environment: Potential Opportunities

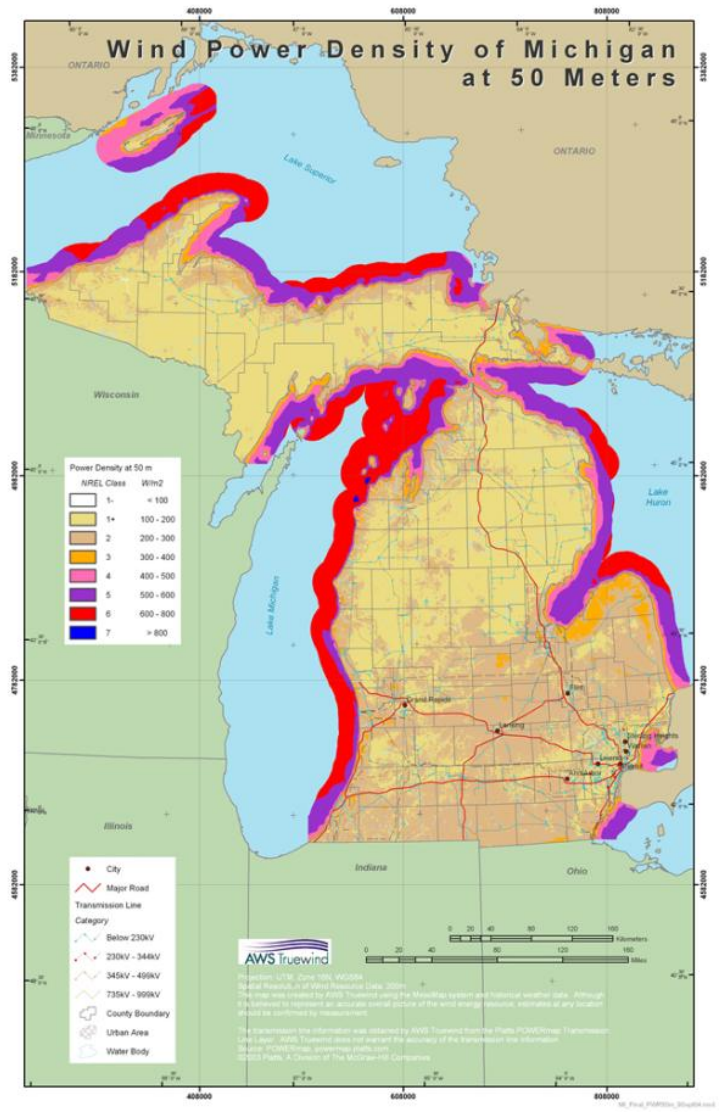
Local Energy Production/Conservation

The depletion of domestic oil and gas supplies has left the U.S. dependent on imported energy resources. More than half of the world's oil-producing countries have passed their peak or production and are now in permanent decline. New oil discoveries have slowed to the point that we consume 4 barrels of oil in the time it takes to find 1. Natural gas is also in decline. These fossil fuels represent non-renewable energy resources. An increase in coal use jeopardizes our environment. A local energy production strategy can contribute to energy independence and community resilience. Unpredictable pricing and supply of traditional fuels may soon jeopardize community stability and energy security. Price increases decrease the spending power of residents. Forward-thinking local governments are planning for the development of renewable energy options to supplement traditional sources and provide greater energy independence. In the future, we must think of fossil fuels as the alternative, and renewable as the norm. L'Anse has begun to depend on biomass fuels as an alternative strategy building local resilience. This section looks at some renewable energy opportunities, although it must be noted that all potential options should be explored, including geothermal, hydropower, biopower, etc.

Wind Energy

Communities need to understand what wind companies need for optimal development opportunity. This is a very capital intensive industry, so it stands to reason that the projects with the most potential and fewest obstacles will be completed first. In addition to good wind resources, geophysical factors, land/economic factors, environmental concerns, and local policy impact a location decision. For example, communities need zoning enabling legislation and incentives to stand out from the competition and reduce transaction costs. Additionally, utility companies consider the condition of the electric grid and transmission lines in an area. It has generally been found that utility scale wind

Figure 3-8: Wind Prospecting Tool



is not feasible in the Upper Peninsula due to capacity challenges with existing transmission lines. However, this does not rule out potential for community or neighborhood scale wind development.

The map at right was developed by AWS Truewind for the Energy Office and the National Renewable Energy Laboratory. This includes an estimate of wind resources based on computer modeling. Estimates at any location should be confirmed by measurement before purchase or installation of any wind power systems. This map illustrates wind speeds at 50 meters above ground level. A typical tower height for the current generation of large utility-scale wind turbines of 750 KV to 2 MW rated capacity is 70 meters. A typical height for small turbines of up to 50 KW rated capacity is 30 meters, which is consistent with on-farm or residential use. Though this map does not show great potential for the Village, it is possible that new technologies or specific locations may generate opportunity.

Various wind turbine designs.

As shown in the pictures at right, there are many different styles of wind turbines that can produce the amount of electricity needed to power the average home. Historically, residential scale and neighborhood scale wind systems were only seen in the rural areas. As the industry changes and wind energy receives more attention, home-owners are looking at wind as a viable way to offset utility bills, even in urban areas. New technology allows wind turban manufactures to address areas of concern that have plagued the wind turbine industry in the past. For example, turbine blades are much smaller in order to reduce noise; while at the same time producing electricity from much slower wind speeds.

Even with the developments in the wind industry, many limiting factors involved with wind still exist. Many variables go into site selection for a wind turbine whether residential or utility scale. Careful long-term study for siting should be done before a wind turbine is installed. In many places in the Upper Peninsula, including the Village of L'Anse, high voltage transmission lines are at capacity and cannot handle the additional kilowatts produced by a utility scale wind farm. However, the residential and neighborhood scale wind turbines do not need large high voltage transmission lines to transport the power produced. In many areas these wind turbines are easily hooked up to the existing power grid and additional electricity produced can be sold to the utility company.

Small scale, either neighborhood or residential wind turbines should be considered a viable source of electricity to supplement traditional sources. This renewable energy source could provide supplementary power for crucial equipment, facilities, and businesses. The Village should consider the viability of wind co-operatives. In this model, the wind development would be financed with public funds

from several municipalities. Project owners might include local governments, businesses, the Tribe, universities, local school districts, farmers, or any citizen.

Solar Energy

Solar technologies directly harness energy from the sun. Solar technologies include photovoltaic systems that convert sunlight to electricity, solar hot water systems that heat water for swimming pools and buildings, and solar space heating systems that provide heat for buildings. In addition, passive solar designs provide heat for buildings, and daylighting strategies use sunlight to reduce electricity used for lighting. Solar energy is another renewable energy source which will help reduce dependence on non-renewable resources and will also provide new jobs.

Many people don't think, looking at the Michigan sky in winter, that solar power would be a viable option. However Michigan gets significantly more sun than Germany, which has nationally added many kilowatt hours of energy via solar panels. The costs of solar energy are mostly related to initial construction, but this energy source is not impacted by price volatility like non-renewable resources.

The potential for solar energy can be enhanced within the community by providing property tax reductions for solar installations. Michigan is promoting local energy production through a feed-in tariff and a buyback program whereby residents who produce more energy than they use can sell it back to the energy company. To support the development of local solar energy production, L'Anse needs to create solar easements for the purpose of protecting and maintaining proper access to sunlight. This includes prohibiting any residential covenants that restrict solar access.

The Village of L'Anse recently completed a solar energy installation at the Water Treatment Plant.

Energy Conservation and Efficiency

Making major gains in energy efficiency is one of the most economical and effective ways to create energy independence and reduce greenhouse gas emissions. Energy conservation can be achieved through efficient energy use (decreasing use while achieving a similar outcome), or by reduced consumption.

We are a nation with a standard of living rooted in energy. Improving energy efficiency will help the government, businesses, and citizens to save valuable economic resources for other purposes. Transportation and buildings are responsible for a majority of energy usage. Strategies to reduce transportation energy consumption include utilizing more energy efficient equipment and reducing vehicle miles traveled. For example, utilizing native landscaping that does not require mowing will save time and money (less fuel, equipment, maintenance, and labor). Building improvements include facilitating energy retrofits in existing buildings and requiring green building

standards and practices for new buildings. Improvements should be made in appliances, heating and cooling systems, lighting, and in building envelope efficiencies.

For greater community resilience, we must think of traditional energy resources as the alternative, and make renewable energy sources the norm.

Building codes should be revised to consider latitude, elevation, microclimate, and building orientation, proportions, and size. In this way, requirements can more efficiently address energy use in buildings. Energy efficiency is particularly important in keeping affordable housing stock affordable. The community should promote the use of programs to weatherize housing for low- and moderate-income persons. This includes attention to upgrading appliances, windows, doors, heating systems, and insulation in those units occupied by households that otherwise might not be able to make these improvements on their own. Low- and moderate-income persons pay a disproportionate amount of their annual family budget on heating and/or cooling their homes. Typically, this comes at the sacrifice of other necessary household expenditures.

Additionally, the Village should conduct an energy audit of all public buildings and institute techniques to reduce energy consumption. This would provide a good example and a case study for all citizens. This could be part of an overall Energy Action Plan to address existing conditions, determine energy goals, and create strategies to achieve those goals. This plan would detail an implementation process to match a reasonable budget and timeline, and would evaluate strategies in relation to net return on investment. Community energy planning involves several elements, including:

- Land Use Planning and Transportation – Includes strategies relating to compact development patterns, smart parking, street design, trip reduction, and stakeholder participation.
- Site Planning and Building Design – Includes strategies relating to building and appliance efficiency, solar orientation, landscaping, winter climate design, wind shielding and shading, pedestrian facilities and microclimates, transit facilities
- Infrastructure Efficiency – Conservation and efficiencies related to water supply and use, wastewater collection and storm drainage, recycling facilities, heat and power recovery, and joint infrastructure planning and delivery
- Alternative and Renewable Energy Supply – Local supply options and efficiencies in cleaner supply options, including district heating and cooling, waste heat utilization, heat pumps, co-generation of heat and power, solar technologies, and alternative fuels.

This kind of planning results in a quick return-on-investment in the form of money savings, more competitive businesses, more affordable housing, improved environmental quality, enhanced livability, creation of local jobs, reduction of greenhouse gases. It also

merits funding from Federal and State sources. A comprehensive plan will achieve better results than an energy component approach as it will target dollars to the investments with the highest return and will weigh and calculate combined benefits.

Summary of Recommendations: Built Environment

1. Feature the historic, scenic, and recreational assets of L'Anse Village in a narrated walking tour (either by podcast or rented audio equipment), and on a tour map.
2. Preserve existing traditional neighborhood form and housing affordability, which are currently very valuable niche assets in L'Anse.
3. Increase housing diversity by encouraging mixed housing types and creating regulations to support accessory dwelling units.
4. Support compact, mixed-use neighborhoods which combine residential, educational, civic, and neighborhood commercial uses in an effort to promote walking and a sense of community. Also support home occupations with regulations to ensure compatibility.
5. Enable home retrofits through strategies to improve energy efficiency, accessibility, and housing appearance in entire neighborhoods.
6. Add pedestrian amenities to the mobile home park and neighborhood of two long blocks just south of US-41. Create a mid-block connection and neighborhood park for the single-family neighborhood and add a pedestrian crossing over US-41 close to popular destinations.
7. Consider a multi-use path or bike trail along the river down to the old powerhouse park facility.
8. Add sidewalks along River Street to access the neighborhoods directly east of the school. Extend sidewalks to the northern-most neighborhoods east of Main.
9. Add small neighborhood parks, gathering areas, and community gardens as needed within the community. Use edible landscaping and native plants when possible.
10. Incorporate a cottage community development with small, closely clustered units close to essential goods and services near senior-assisted living and residential long-term care facilities to serve the transitioning needs of the elderly. Explore the feasibility of etrofiting or redeveloping the old hospital property for this type of mixed-use residential opportunity.
11. Pursue redevelopment of obsolete buildings on the waterfront to add prime residential condos or attached housing along with mixed-use retail, office, service, and educational uses.
12. Marina improvements include extending the break wall to provide additional capacity, and adding landscaped islands, trees, and natural stormwater management solutions to the parking lot to preserve water quality and provide a more pleasing transition to the Downtown.
13. Continue the façade improvement program to preserve historic buildings in the Downtown, and extend the program to corridor businesses to improve gateway image.

14. Identify priority redevelopment sites. Place a priority on redeveloping vacant and underutilized properties before encouraging greenfield development. Remove or mitigate obstacles to development in infill areas and enact regulations to ensure compatibility with community character.
15. Direct new industrial development to existing industrial parks.
16. Utilize site plan review standards and impact studies to ensure that future industrial or large commercial development does not negatively impact the environment or overburden existing infrastructure or public services. Require new large commercial or industrial development on greenfield sites to provide the necessary new infrastructure to ensure adequate provision of sewage disposal, stormwater management, potable water, and other critical public health and welfare concerns including the appropriate buffers.
17. Update the Village zoning ordinance with the appropriate regulations to ensure the compatibility of neighboring land uses and provide maximum environmental protection. Consider requirements for landscaped buffers, screening, operation standards, and natural stormwater management techniques when appropriate.
18. Adopt regulations to support mixed-use development, and streamline the approval process for priority development types. Enact strategies that allow the Village to become a long-term financial investor in its own future.
19. Develop a comprehensive program to manage blight. Update blight and property maintenance ordinances and add provisions for energy efficiency to all building codes. Utilize municipal civil infractions for enforcement.
20. Maintain the connectivity level and integrity of the traditional grid street pattern into the future.
21. Pursue funding support to create a Non-Motorized Transportation Plan to identify specific projects and phases in a systems approach.
22. Consider a street connection from the Downtown west to US-41 along the bay.
23. Implement an Asset Management Program.
24. Support a 5-year traffic count, accident history, and sign inventory.
25. Adopt access management standards into the zoning ordinance.
26. Implement alternative modes of transportation in road improvement projects. Consider adding bike lanes, pedestrian infrastructure, and street amenities to Main and Broad streets with road reconstruction and resurfacing projects.
27. Pursue streetscaping and aesthetic enhancements for the US-41 corridor through the Village, including pedestrian scale lighting, street trees, bicycle amenities, and wayfinding and gateway signage. Regulate corridor signage to be more consistent in appearance.
28. Pursue streetscaping in the Downtown including energy efficient, dark sky compliant, pedestrian-scale lighting; permeable or recycled pavement material; and edible or native landscaping whenever possible.
29. Implement sign regulations to ensure compatibility in size, placement, and materials of signs in both the Downtown and along the highway corridor.
30. Implement community-wide way-finding signage.

31. Develop an attractive western community gateway utilizing landscaping and signage to create a community focal point and identity in the vicinity of L'Anse Avenue.
32. Design parking standards for large parking areas to incorporate landscaped areas and trees. Design these areas to accommodate snow storage while protecting plants. Downtown parking areas should include landscaping on the pedestrian edge as well as a short wall or fence of iron or masonry materials to buffer vehicular areas from pedestrian areas. Place parking to the rear or sides of buildings to preserve interaction between pedestrians and store fronts. Reduce the need for parking by utilizing shared parking standards for adjacent compatible uses. Connect adjacent parking lots when possible to facilitate easy access without returning to the highway corridor.
33. Preserve and protect community rail service to enhance community sustainability and resilience.
34. Preserve and improve public transit options.
35. Preserve and improve harbor and port facilities.
36. Support programs and strategies to preserve and enhance community walkability/bikeability through appropriate infrastructure improvements.
37. Conduct sidewalk inspections and schedule repairs as part of annual maintenance operations. Consider funding sidewalk maintenance and repair through special assessments.
38. Pursue the creation of a multi-use trail along the waterfront between Baraga and L'Anse, L'Anse and Pequaming, and along the Falls River in L'Anse through collaborative opportunities.
39. Adopt *Complete Streets* standards and implement in all street projects.
40. Require landscaped buffers around and within parking lots and along long, blank walls to improve community aesthetics, accommodate pedestrian traffic, and mitigate winter climate conditions. Encourage the reduction of impervious surfaces.
41. A comprehensive storm sewer map should be compiled from available record drawing and additional field data obtained. The Village should consider televising the storm sewers to obtain the size, pipe composition, and physical conditions of the existing lines. A preventive maintenance plan, schedule, and budget should be developed.
42. Because Village health and safety depends on the water quality of Keweenaw Bay, a comprehensive stormwater management plan should be developed, with a goal of utilizing natural stormwater management techniques when possible. Coastal zone funding may be available to assist in this effort. Low impact development and innovative stormwater management standards should be incorporated into the zoning ordinance.
43. Preserve and enhance riparian buffers along the Falls River and Linden Creek to protect water quality and aquatic and wildlife habitat.
44. A water system master plan and a five year capital improvement plan should be developed for the water system. As part of the plan, a hydraulic model should be created to determine improvements to capacity and pressure.
45. Eliminate dead end mains by looping the existing water main system as soon as possible.

46. Implement a water valve exercise schedule, which could be performed concurrent with the water main flushing program.
47. Hydrant flow and water system residual pressure records should be maintained for future ISO insurance rating documentation.
48. The present water system map for the Village should be updated annually with the records from construction projects completed.
49. Continue to implement a sewer line cleaning maintenance program.
50. Recommendations for plant improvements, collection system improvements and lift station rehabilitation are include in the 2008 comprehensive plan and should be utilized for future planning of system upgrades.
51. The present treatment operations are operating at 70 percent of capacity. Future development expansion of large acreage industrial, commercial or residential property will need to be evaluated for impacts on the treatment process. The Township is presently performing an evaluation of the plant and system for potential industrial expansion.
52. Annually update the sanitary system comprehensive map with the records from construction projects completed.
53. The Village of L'Anse recognizes the importance of working toward local energy independence and security through the development of renewable energy sources and implementation of conservation and efficiency practices. The Village supports the creation of a comprehensive Energy Action Plan to address this goal.
54. Prepare for neighborhood or single-use wind systems by updating ordinances, providing education and guidance, and coordinating and facilitating site testing.
55. Consider an opportunity to participate in an area wind-cooperative.
56. Support the development of solar energy within the community by seeking or creating incentives for solar installations, preserving solar easements, and updating ordinances to consider building orientation and the accommodation of infrastructure.
57. Provide community leadership in supporting energy conservation and efficiency with coordinated and targeted strategies in all sectors of the public and private built environment, starting with public buildings, prime businesses, and low- and moderate-income households. Plan and implement complementary improvements in land use regulations, transportation strategies, site planning, building design, infrastructure efficiency, and renewable energy production. Appropriate changes will be made to the zoning and building codes.

Social Environment Resources

Social resources are those that involve the provision of civic or social services within the community. These resources have a direct impact on quality-of-life.

Cultural and Civic Resources

Cultural/Civic resources can enhance a community's quality-of-life and generate confidence for the attraction of new businesses and residents. Public services include public safety, medical, educational, telecommunications, and solid waste disposal and recycling services.

Public Safety

Public safety services include police, fire, and ambulance services.

Police Protection

Service is provided to all areas of the Village by the Village Police Department, the County Sheriff's Department, and the Michigan State Police. The Keweenaw Bay Indian Community Tribal Police also patrol areas of L'Anse Township included in the reservation. These officers cover both privately owned and Tribal trust land calls. No additional staff or capital expenditures are anticipated at this time, although another vehicle may be added at some time in the future depending on area growth.

Source: www.lansefire.com

Fire Protection

The Village's fire department is comprised of 21 volunteer fire fighters, many of which also serve key roles in Baraga County's Emergency Management and response. Volunteers in the department serve as public information officers, emergency medical technicians, fire service, and EMS trainers. The department serves the Village, L'Anse Township, Keweenaw Bay Indian Community, and Baraga County. The fire department not only responds to structural fires, but also grass and forest fires, automobile accidents requiring the "Jaws of Life", rescue, and acts of terrorism. The department is the only department in the Baraga County with "Jaws of Life" rescue responders and the primary responders for emergencies on the Keweenaw Bay Indian Community Reservation and tribal housing.

To assist in the mission of protecting the Village and the surrounding area, the department has a variety of equipment. According to the fire department webpage; this equipment includes one brush truck, one rescue unit, one 3,000 gallon capacity tanker pumper truck, one 1,000 gallon capacity pumper truck, and an Argo eight wheeled tracked amphibious rescue vehicle.

Ambulance Services

Ambulance Service is provided to the area by the L'Anse Fire Department and Bay Ambulance located in Baraga, MI. Both agencies provide on-road and off-road rescue services.

Medical Services

Quality medical services are not only crucial to the health and well-being of residents, but are a valuable public amenity in attracting residents to an area.

Hospital

Baraga County Memorial Hospital, which was previously located on North Main in the Village of L'Anse, constructed a new facility in L'Anse Township on US-41 just south of the Village. New sewer and water facilities were constructed to accommodate this facility. The new facility will incorporate physician offices into the structure along with a retail pharmacy for "one stop" medical care.

Baraga County Memorial Hospital is a critical access hospital with a long-term care unit. The continuum of care includes Baraga County Home Care & Hospice, Baraga County Medical Equipment, Bayside Village Nursing Home, and BCMH Rehab & Fitness Center. Services include cancer, cardiac, emergency, home care, imaging, laboratory, medical rehab, surgical, women's and children's services, telehealth and telemedicine. There are family practice, specialty, and weekend walk-in clinics. Specialty clinics include allergy, ear/nose/throat, neurology, ob/gyn, oncology, orthopedic, ophthalmology, pain diagnostics, podiatry, surgical, sports medicine/EMG, and urology. Home care offers skilled nursing services, occupational therapy, physical therapy, speech therapy, social work, and blood pressure screenings and exercise programs.

Care for Aging

Bayside Village is a nursing facility that is adding new beds. There is a need for more assisted- and modified-living facilities in the L'Anse/Baraga area.

Educational Services

As previously discussed in this plan, strong educational resources are crucial to the future of L'Anse in so many ways, and the community must continue to support improvements.

The L'Anse Area School District started in 1858 in a small schoolhouse with one teacher and a few students. Today the school district is made up of the C.J. Sullivan Elementary School, L'Anse Middle School, and L'Anse High School. The school district provides sports opportunities including football (varsity, junior varsity, and Middle School), Boys and Girls basketball (varsity, junior varsity, and Middle

School), Girls volleyball (varsity and junior varsity), Hockey (varsity covers grades 9 - 12), Bowling (varsity and junior varsity), Track (varsity and Middle School), Cross-Country (varsity and junior varsity), and Golf (varsity covers grades 9 – 12).

School enrollment within the Village of L'Anse increased by only 27 people from 1990 to 2000. Of the 506 people enrolled in school in 2000, 41 were in preschool, 37 were in kindergarten, 254 were in elementary/middle school grades 1-8, 117 were in high school grades 9-12, and 57 were in college or graduate school.

L'Anse students are involved in stewardship projects within their community. For example, L'Anse Middle School seventh graders cleaned up First and Second Sand beaches near Pequaming as well as the L'Anse Waterfront Park as part of L'Anse Middle School's ongoing Lake Superior Stewardship Initiative (LSSI) project that began with a clean-up of the Falls River and Linden Creek.

The BHK Child Development Board offers Head Start programs plus a wide variety of services for children and families, including adult education, family literacy, support for pregnant mothers, family wellness, AmeriCorp program, family preservation, toy libraries, playgroups, support groups, health screenings, home visits, and after-school and summer learning programs. This is a non-profit organization with a three county board of commissioners and elected parent council.

Telecommunication Services

Quality telecommunication services are vital to a knowledge economy. The demand for more and better wireless service is on the rise. Wireless carriers establish and expand their service by constructing base stations or by installing their antennas on an existing structure. Communities are challenged to enable wireless deployment in a responsible way and to develop zoning regulations and comprehensive plans to accommodate this rapidly changing environment and technology. Regulations must deal with construction, siting, and design of wireless infrastructure which is regulated on the federal, state, and local levels. Typically regulated elements include tower height, lighting and marking, placement, frequencies and power levels, type and size of associated equipment structures, fencing, signage, buffering, screening, and landscape planting.

Relevant Federal laws and agencies include the Telecommunications Act of 1996, the Federal Communications Commission (FCC), the National Environmental Policy Act of 1969 (NEPA), the National Historic Preservation Act of 1966 (NHPA), the Federal Aviation Administration (FAA), and the Occupational Safety and Health Administration (OSHA). Local governments typically regulate these facilities through zoning for infrastructure siting. Sites should be safe, effective, and as visually unobtrusive as possible. Companies seek those sites that meet federal regulations, comply with local siting requirements, are acceptable to the community, provide the highest quality wireless service, and result in the minimum number of sites required overall to meet the service needs of the market. Local

government decisions must not discriminate among providers. The community cannot pass laws or take actions that prohibit or have the effect of prohibiting wireless service. The community cannot regulate wireless based on environmental concerns about radio frequency emissions if the facility will operate within FCC standards. The community must act on siting requests in a reasonable period of time, and must issue zoning denials in writing, supported by substantial evidence and findings contained in written records. The community can mitigate the impacts of wireless facilities by locating facilities in or around areas of mature vegetation that screen all or part of the facility, coloring the structure to blend in with the surrounding vegetation or skyline (to the extent they meet federal regulations regarding marking schemes), planting vegetative cover or constructing fencing at the base of the facility to screen the ground equipment, pursuing stealth options such as designing the tower or monopole to look like a tree or flagpole, or requiring low-profile or slim-lined structures where the antennas are installed more closely to the tower, thereby reducing the physical profile of the facility.

Colocation of wireless equipment allows the maximization of existing facilities and structures, fills service gaps more quickly, and is less expensive. The carrier either rents space on an existing wireless tower or rents space on an existing structure in a community that serves other functions, such as water towers, silos, smokestacks, church bell towers, buildings, high-tension utility towers, utility poles and light standards in highway rights-of-way, and athletic field light standards. Colocation may not be possible if structural limitations or municipal restrictions interfere, adjacent buildings or structures block signals, capacity would be overwhelmed, or structures are not tall enough. Local governments typically require new towers to accommodate at least three wireless carriers, and to assure the availability of the tower for collocation. New towers would have to prove no colocation opportunities exist and a new tower is needed. The approval process would be streamlined for colocation applications.

The phone service is provided to the Village by GTE, Baraga Telephone, AT&T, MCI, Sprint, and others. Cable, DSL, and high-speed dial-up and broadband internet is available in various locations. The local newspaper is the L'Anse Sentinel. There are two radio stations, WCUP and WGLI.

L'Anse should continuously seek to improve communications infrastructure and services to support economic growth. The Village should take steps to link as many homes and businesses to the global internet and to each other as possible. This may involve increasing the availability of wireless internet access within the community, facilitating the purchase of used equipment, or providing publicly-available computer resources and software. The Village should require "open capacity" on any fiber optic infrastructure that is constructed, which may be used in the future to expand E-commerce activity.

The internet is the Village's link to the rest of the world, and the Village web-site is an important portal of first impression. The web-site should provide links to global business networking opportunities and organizations to support area businesses and organizations. It should provide an updated community profile with photos of area events and favorite places. It should have detailed profiles of area

businesses and producers, including area artists and crafters. Whether alone or in collaboration with area organizations, the Village needs to maintain an updated website to provide basic information on community services and events, and to market and promote the community.

Solid Waste Management

Solid waste is regulated under Subtitle D of the Resource Conservation and Recovery Act (RCRA). The goal of this act is to encourage solid waste management practices that promote environmentally sound disposal methods, maximize the use of materials recovered from waste, and foster resource conservation.

It is important to have a comprehensive plan for waste management considering the complexity and legal requirements of the process. Stakeholders to the process include appropriate local, state, and federal agencies, local industry, private waste management enterprises, and citizens. An integrated solid waste management program includes recycling, landscape waste management (e.g. composting), special pickups, household hazardous waste management, public education regarding waste disposal and diversion options, direct or transfer waste hauling for disposed material, and final disposal at landfills or incinerators. A sustainable strategy for waste management, as promoted by the Environmental Protection Agency, is to first generate as little waste as possible (source reduction), then recycle as much as possible, then properly dispose of what is left over. Source reduction includes reducing the size and weight of packaging, purchasing in bulk, making products last longer, using a mulching mower, and reducing manufacturing or commercial waste. Recycling includes recapturing paper, glass, aluminum, and other materials (including plant or food wastes for composting). These materials are then turned into new products. Transfer stations are facilities where waste from smaller vehicles, such as garbage trucks, is consolidated and placed on larger vehicles for transport. Transfer stations are potentially impacted by local and state regulations dealing with environmental and nuisance impacts. The most common concerns include noise, odor, traffic, dust, vectors, litter, and aesthetics. Other concerns include water pollution, fire concerns, and hazardous waste. Materials recovery facilities then process and prepare recyclables for sale to end-user markets.

Currently, solid waste collection in L'Anse is provided under contract by Waste Management. The Village has had interest in a recycling program, however, this service is not currently provided in the area. L'Anse should participate in the creation of a County or Regional Solid Waste Management Plan and implement the recommendations including creating recycling opportunities.

Summary of Recommendations: Social Environment

1. Continuously seek to improve communications infrastructure and services in L'Anse to support economic growth.
2. Update regulations to support responsible development of telecommunication infrastructure.
3. Link as many area businesses and residents to the internet as possible by increasing the availability of wireless internet access, facilitating the purchase of used equipment, or providing publicly-available computer resources and software.
4. Require "open capacity" on any fiber optic infrastructure that is constructed, which may be used in the future to expand E-commerce activity.
5. Maintain an updated Village website to provide basic information on community services and events and to market and promote the community and its unique assets including business, arts, and crafts offerings.
6. Participate in the creation of a County or Regional Solid Waste Management Plan and implement the recommendations including creating recycling opportunities.

> ***"It is the duty of officials at every level of government to help protect the air, water, and land from pollution, impairment, or destruction."***
> *Michigan Environmental Protection Act*

Natural Environmental Resources

Natural resources have always been of vital importance to the political, economic, and social environment of the Upper Peninsula. Local, state, and federal governments have shared responsibility for coordinated decisions affecting common resources as the natural world does not operate according to political boundaries.[2] Additionally, our environmental resources are all interconnected as components in larger ecosystems. Action taken to address one component must also consider the interaction with other components. Successful environmental management strategies address not only specific features that need protection, but the gaps and opportunities for interconnection between these features. Responsible stewardship of these vital resources today is necessary to ensure sustainability for the benefit of future generations.

Local government is the first line of defense for our environment. Local zoning ordinances must reflect the obligation under the law to make decisions that prevent pollution, impairment, or destruction of the environment. As conflicting demand for use and consumption of

[2] Ardizone, Katherine A. and Wyckoff, Mark A. *Filling the Gaps: Environmental Protection Options for Local Governments. 2003.*

our natural resources has increased, so has the need for regulatory intervention.[3] Local governments have many options for environmental protection as there is an important relationship between land use (which is under the jurisdiction of local governments) and ecological functions. This section presents the current state of environmental resources in L'Anse, and discusses the necessary policies and tools to ensure future sustainability of these resources. It is especially important to put these policies in place during or before economic downturns, as resource protection often takes a back seat to jumpstarting a lagging economy.

Natural Features

The physical capability of land and natural constraints, such as sensitive environmental areas and inappropriate soils, help a community decide where and how development should take place. These resources also help define the character of a place, contribute to the local economy, and provide places for recreation. Neglect or abuse of the natural environment reduces quality-of-life for humans and for other inhabitants of the Earth. These resources are part of the heart and soul of the community, and are the reason that many people feel closely linked to a certain place. Natural features include the climate, watersheds, coastal areas, wetlands, forests, fish and wildlife, soils, and scenic and recreational resources. The following sections give a profile of current resources and discuss special considerations.

Overview

Baraga County was completely covered by a series of glaciers during the Pleistocene Epoch. The present topography and soil material results from glacial deposits of the Wisconsin Glacier which melted 10,000 to 12,000 years ago (the last to recede). Isolated hills and knobs dot the landscape in the Village and the surrounding area.

The Village of L'Anse is known for the beautiful view of the Keweenaw Bay, extensive shoreline, recreational harbor facilities, pristine wilderness areas, and inland water resources such as waterfalls and trout streams. Lake Superior has played a major role in the history of the Village as a water source, transportation mode, recreational resource, and economic driver through tourism. Baraga County contains one wildlife area (Baraga Plains State Wildlife Management Area), two state parks (Baraga State Park and Craig Lake State Park), and one state forest (Copper County State Forest).

Climate

Climate is a challenge for food and crop production. Depending on daily minimum temperatures, the growing season is about 180 days, with occasional seasons extending slightly longer. Last freezing temperatures in the spring vary from early May to early June. First freezing temperatures in fall occur in mid September to mid October.

[3] Ibid.

The weather data provided below is compiled by the National Oceanic and Atmospheric Administration for the station in Herman, Michigan (elevation 1,740 feet), which is just southeast of L'Anse Village. This data may not perfectly portray conditions in L'Anse because of the lake effect on weather conditions in L'Anse Village. Data is summarized for the period from 1971 to 2000.

In January, the average maximum temperature is around 20 degrees Fahrenheit and the average minimum is 3.5 degrees Fahrenheit. In July, the average maximum temperature is around 77 degrees, with the average daily minimum temperature at about 52 degrees. The highest daily temperature for this time period is 96 degrees Fahrenheit. The lowest daily temperature is -40.

Total annual average precipitation for this station is 38.25 inches, and the average annual snowfall is about 216 inches. However, temperatures and precipitation are greatly influenced by Lake Superior.

Although climate creates challenges for conventional growing practices, northern communities have successfully utilized hoop houses and greenhouses to extend the growing season. Experimentation is taking place on cost effective ways to provide supplemental heat for purposes of growing food. One option may be to utilize waste heat from the L'Anse Warden Electric Plant or CertainTeed's operations.

Many people love to experience the changing of the seasons, and value a four-season community. Although summers are short in the Upper Peninsula, they are exceedingly wonderful and free of the heat and humidity that plague many areas. Winters are becoming increasingly milder in the region, but many people who live in the area value the winter recreational opportunities created by the snow. The area would benefit from marketing to change faulty perceptions about area climate and lifestyles. A "reverse snowbird" marketing strategy may draw tourists from southern states or regions to enjoy the mild summers and abundant water resources.

Watersheds

A watershed is an area of land in which all surface waters drain to a common outlet, which in Michigan is always the Great Lakes. Watershed management is a regional approach based on the movements of water and pollutants as defined by natural boundaries rather than political jurisdictions, and primarily focuses on land use which impacts water quality.

The map at right shows L'Anse area watersheds. The Village of L'Anse is in the Dead-Kelsey watershed. Other area watersheds include the Michigamme and the Sturgeon. Wetlands, coastal areas, and watersheds are important items to consider when constructing a Land Use Plan. As water travels over the land, it picks up pollutants and sediment which impacts water quality.

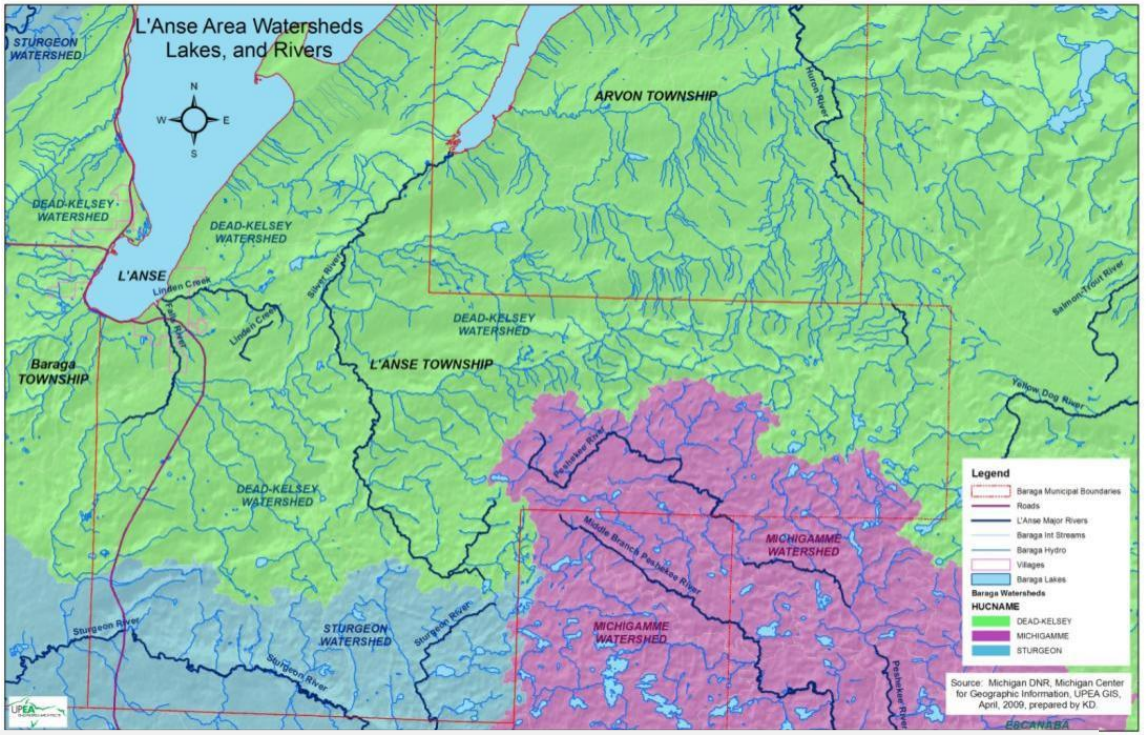


Figure 3-9: L'Anse Area Watersheds

The Village of L'Anse would benefit from being a part of a collaborative watershed planning initiative in order to be eligible to receive funding for the protection of water resources. Specifically, the Falls River and Linden Creek within the Village provide outlets to the Keweenaw Bay and Lake Superior, so good stormwater management principles and water protection provisions are of primary importance in the Village of L'Anse. MDEQ approved watershed plans in the area include one for the Otter River in Baraga and Houghton counties, and one for the Trap Rock River in Houghton and Keweenaw counties.

Coastal Areas

Areas of land and water interface are particularly fragile environments providing critical habitat for fish, waterfowl, plants, and other wildlife. Coastal areas are the last stop for surface pollutants from an entire watershed, and serve as a final filtration opportunity before

water reaches the Great Lakes. Coastal wetlands absorb the energy of the waves and diffuse the flow of stream and river currents to protect shorelines from erosion. Shoreline issues involve ever-changing lake water levels, adverse impacts of development, and delicate soils that are prone to movement and/or erosion.

Inappropriate shoreline development can disrupt natural processes, threaten beach creation and replenishment, or exacerbate erosion. Development that is located close to the shore will also contribute more pollutants to the water body, whether from stormwater runoff of paved surfaces, agricultural and residential lawn nutrient loading, and improper septic treatment. Good land management practices can protect coastal or shoreline ecosystems.

The adverse impact of development on important coastal regions has prompted the State of Michigan to pursue all means of protecting its coastal areas. Approximately 80 percent of Michigan's coast is currently within private ownership, making resource protection difficult. The growth in seasonal homes along the coasts has resulted in land fragmentation that disrupts natural wildlife corridors and removal of beneficial beach vegetation, adversely impacting fish populations and water chemistry. Unmanaged logging and mineral extraction activities threaten the character of the coast.

The Village of L'Anse should work with the Keweenaw Bay Indian Community, appropriate organizations from Michigan Technological University, area watershed partnerships, and other interested parties to identify priority areas and design a CELCP project.

Wetlands

Wetlands are surface areas that are usually saturated with water that function like natural sponges, storing water, filtering it, and then slowly releasing it. This process helps control erosion, recharges groundwater, and reduces flood heights. Wetlands also trap sediment, and serve as breeding grounds for many species of animals. Wetlands can contain standing water, but can also be grassy meadows, shrubby fields, or mature forests. Since wetlands filter contaminates and sediments, wetland protection and mitigation efforts can also contribute to effective stormwater treatment strategies.

According to Part 303 of the Clean Water Act, wetlands are regulated if they are:

- Connected to one of the Great Lakes
- Located within 1,000 feet of one of the Great Lakes
- Connected to an inland lake, pond, river, or stream
- Located within 500 feet of an inland lake, pond, river, or stream

- Not connected to one of the Great Lakes but more than 5 acres in size and located in counties with a population of more than 100,000
- Not connected to one of the Great Lakes or an inland lake, pond, stream, or river, and less than 5 acres in size, but the DEQ has determined that these wetlands are essential to the preservation of the state's natural resources

Local governments can create wetland regulations that address wetlands not protected by the State (isolated, non-contiguous wetlands Alternately, local governments can address wetland protection in site plan review. This is accomplished by requiring that state and federal (if relevant) wetland permits be obtained as a condition of local zoning approval. However, this may not allow the municipality to address wetlands on small-scale projects, since site plan review is usually reserved for large-scale projects. Open space zoning may also achieve desired wetland protection goals for the community.

All communities must strike a balance between accommodating development and protecting the environment. Many communities require developers to mitigate or lessen the effects of unavoidable wetland destruction by restoring a wetland or creating a wetland in an area that was not one previously. Although artificially constructed wetlands can provide many of the aesthetic services of a naturally occurring wetland, and can be an option for treatment of stormwater, they take many years to establish and rarely provide the same groundwater recharge functions, or plant and animal habitat, as naturally occurring wetlands. Development agreements can be difficult to enforce, so it is better economically and environmentally to protect existing wetlands rather than try to build costly and less effective artificial wetlands.

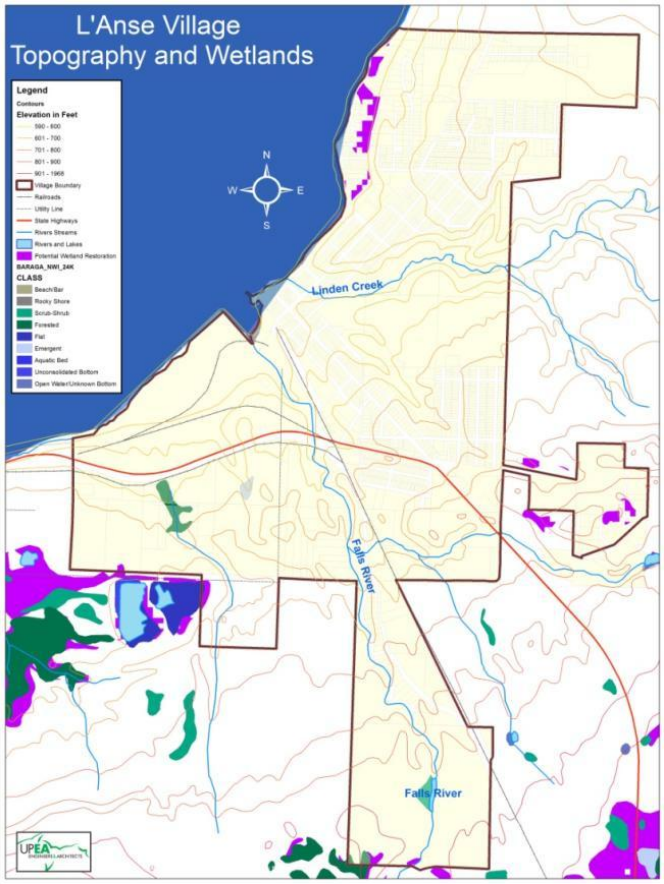


Figure 3-11: L'Anse Village Topography and Wetlands

As rain or snow falls, about 40 percent returns back to the atmosphere through either evaporation or transpiration, 50 percent soaks through the soil and into the groundwater, and the remaining 10 percent runs off the surface directly into lakes, rivers, and streams.

Providing buffers along rivers, streams, and lakes, as well as protecting wetlands can slow the runoff and allow a greater percentage of water to return to the groundwater.

As seen in the topography and wetland map on the page 83, the Village has limited wetland area. However, the Village has a few locations that are potential wetland restoration sites (purple areas on map). Many of these sites are located along the shoreline and are places where a wetland has been altered from its natural condition.

Forests

The Village of L'Anse is surrounded by extensive forested areas that still contribute to economic opportunity and industry in the Village. Nearby forest management areas include the Baraga Plains, Central Houghton, Covington/Ned Lake, Huron Mountains, Menge Creek, and Peshekee Highlands.

Fish & Wildlife

Baraga County is home to several state protected plant and animal species including these threatened species:

- Lake Sturgeon (fish)
- Goblin Moonwort (plant)
- Showy Orchis (plant)
- Common Moorhen (Bird)
- Common Loon (Bird)
- Narrow-leaved Gentian (plant)
- Big-Leaf Sandwort (plant)
- Farwell's Water Milfoil (plant)
- Canada Rice Grass (plant)

And these Special Concern species:

- Freija Fritillary (butterfly)
- Frigga Fritillary (butterfly)
- American Bittern (bird)
- Purple Clematis (plant)

- Wood Turtle (animal)
- Douglas's Hawthorn (plant)
- Fragrant Cliff Woodfern (plant)
- Red-Disked Alpine (butterfly)
- Bald Eagle (bird)
- American Shore-Grass (plant)
- Bigmouth Shiner (fish)
- Osprey (bird)
- Northern Gooseberry (plant)
- Blue-Eyed-Grass (
- Eastern Box Turtle (animal)

And this listed endangered species:

- Kirtland's Warbler (bird)

And these habitats:

- Great Blue Heron Rookery
- Interdunal Wetland—Great Lakes Type Alkaline Shoredunes Pond/Marsh
- Upper Midwest Type Pine Barrens

The Baraga Plains is home to a State waterfowl management area just east of Alberta that has special use and hunting rules.

Highlighted fish species in Baraga County include Bluegill, Brook Trout, Brown Trout, Coho Salmon, Lake Sturgeon, Lake Whitefish, Largemouth Bass, Northern Pike, Pygmy Whitefish, Rainbow Smelt, Rainbow Trout, Rock Bass, Smallmouth Bass, Walleye, and Yellow Perch. Fish predator species (invasive species) include the eel-like lamprey (sea and brook types) which are subject to a joint control program between the United States and Canada. These predator species have contributed to the decline of whitefish and lake trout in the Great Lakes.

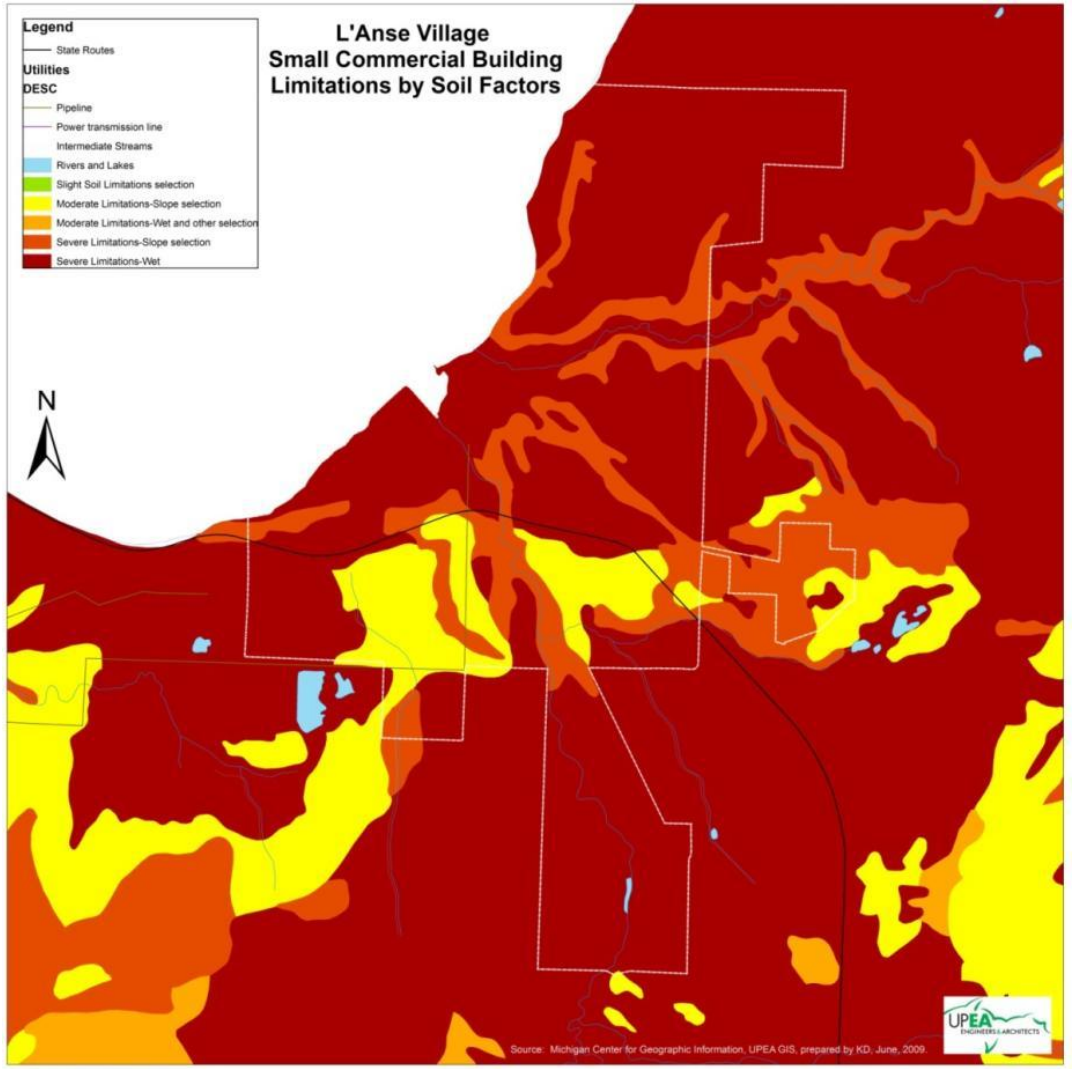
Soils

Soil composition analysis is used in land use planning to predict soil behavior for selected land uses and to identify special practices needed to ensure compatibility of land use. Improvements may be needed to overcome soil and slope limitations, depending on the planned use of the land. This information is useful to farmers, foresters, community officials, engineers, developers, and home buyers. Topography is also important information to consider during land use planning. As seen in dark orange portions of *Figure 3-13*, some areas of the Village have slope limitations. These contours are also visible on the Topography and Wetland Map (*Figure 3-11).* *Figure 3-13* is a map showing the limitations on small commercial development based on the soil type.

The Village of L'Anse contains the following general soil associations:

1. *Munising-Yalmer association*
   This soil association is found on flat land and gentle side slopes and is dissected by drainage ways. In the County, this soil association appears mostly in wooded areas with some small clear cut areas. This soil poses slight forest management concerns in that there are equipment limitations, seedling mortality and plant competition. The soil association is fairly suited for cultivated crops, hay and

Figure 3-13: Soil Limitations on Development



pasture. However, it can be seasonally wet and prone to erosion. The soil is not generally well suited for sanitary facilities.

2. *Skanee-Munising-Gay association*
   This soil association is found on flatland and in depressions and drainage ways. Most areas where this association is found in the county are wooded. This soil association is well suited for woodland areas, with the only concerns being equipment limitations, seedling mortality, and plant competition.
3. *Kinross-Au Gres-Croswell association*
   This soil association is poorly drained to moderately well drained and is found on lake plains, outwash plains and till plains. In the County this association is mainly found in woodland areas. It is best suited for woodland areas with primary concerns being equipment limitations, wind throw hazard and plant competition.

Scenic/Recreational Resources

The Village of L'Anse and the surrounding areas abound with recreational opportunities for all ages, year-round.

Scenic Amenities

The area is known for its beautiful Lake Superior shoreline, pristine wilderness areas, waterfalls, lakes, and streams. From the shoreline and bluffs of the Village, residents have a beautiful view of the Red Rocks and beautiful Keweenaw Bay that stretches between the Villages of Baraga and L'Anse. Residents want to preserve and more fully utilize these scenic amenities to attract new residents. Recreational trails are envisioned for the entire length of the Bay from the Village of Baraga, through the Village of L'Anse, and up to Pequaming. The areas along the Falls River would also provide outstanding opportunities for recreational trails and fishing opportunities from the Bay all the way to the Village owned property near the old Powerhouse.

Scenic waterfront path leading to the bluff

Falls River by the old powerhouse.

Recreational Facilities

The Michigan Department of Natural Resources (MDNR) recommends the *Recreation Park and Open Space Guidelines* of the National Recreation and Park Association (NRPA) as a standard for comparison for minimum acceptable spatial allocation measures for public parkland. The accepted standards, used as flexible planning guidelines, not absolutes, are:

- Community-based parks—6.25 to 10.5 acres of parkland per 1,000 residents
- Regional-serving parks—5 to 10 acres of parkland per 1,000 residents

L'Anse Village population is almost 2,000, so the minimum spatial allocation is from 13 to 21 acres of community-based parks and 10 to 20 acres of regional-serving parks for the residents. L'Anse currently has approximately 4 acres of parks (Waterfront Park, Marina/Boat Launch, Third Street Park, and Recreation Building) plus two walkways along the shore and Linden Creek that are publically-owned recreation lands. The school facilities (L'Anse Area Schools and Sacred Heart) add another 8 acres of recreation land, much of which is utilized by the public.

The NRPA standards address the following types of parks:

- Mini-parks with specialized facilities serving a limited population or interest group with a service area less than ½ mile radius, located within neighborhoods and in proximity to multi-family or elderly housing—0.25 to 0.5 acres per 1,000 people (0.5 to 1 acre, Village)
- Neighborhood park or playgrounds with areas for intense recreation activities with a service area of a 1 mile radius to serve a population up to 5,000, located with easy accessibility to neighborhood populations, geographically centered, and with safe walking and bike access—1 to 2 acres per 1,000 people (2 to 4 acres, Village)

- Community Park with intense recreational facilities or areas of natural quality for outdoor recreation with a service area of more than one neighborhood (1 to 2 mile radius), over 15 acres in size, easily accessible to the neighborhood served—5 to 8 acres per 1,000 people (10 to 16 acres, Village).

In the process of creating the 2003 Village of L'Anse, Township of L'Anse, and L'Anse Area School Recreation Plan, these standards were discussed in relation to the Village. In smaller communities such as L'Anse, neighborhood and community parks need not be separate facilities since existing parks are within easy access of the local population. However, it is also important to anticipate the needs of tourists along with those of the local community.

In conducting a needs assessment for the 2008-2012 Recreation Plan it was discussed that there is a need to expand the size of the current Waterfront Park to serve both residents and tourists. This site provides outstanding scenic opportunities, connects to community walkways, is adjacent to Downtown businesses and the marina, and is highly visible due to the topography and scenic draw of Keweenaw Bay. The park has the potential to catalyze other economic opportunities within the core of the Village. More parking and picnic facilities are needed for recreation users.

. Shown at right is an analysis of recreational facilities in comparison to DNR Opportunity Standards. This analysis is a quantitative analysis, yet there are other factors to be considered in recreation planning, such as location and quality of opportunities, accessibility for all members of the population, and unique community needs. For a more extensive qualitative analysis, see the community input summary later in this section.

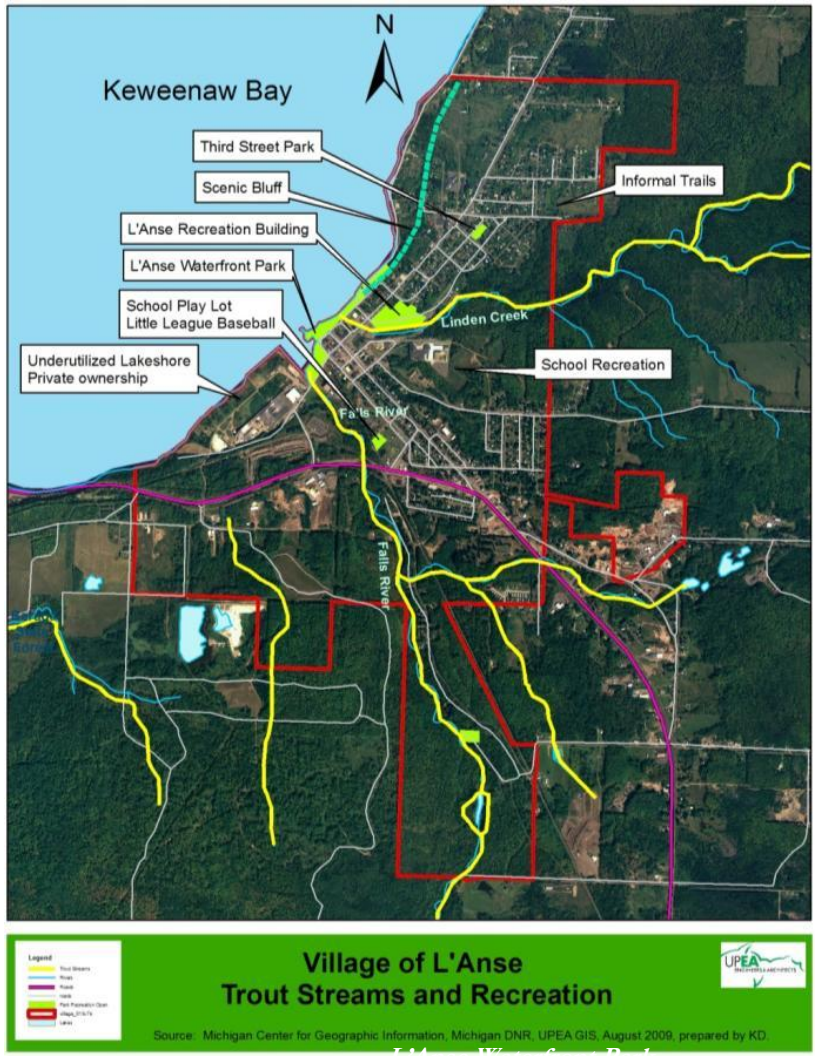
The chart compares the Michigan Recreation standards based on actual population to existing facilities to determine possible deficiencies. Items such as the archery, rifle, and shotgun ranges are less frequently found in small communities. These items should be pursued only if local demand is evidenced

Figure 3-14: MDNR Recreation Standards

Recreation Opportunities per Michigan DNR Opportunity Standards: Village of L'Anse					
Village of L'Anse Population 1,888**	Michigan Recreation Standard--1 unit per population	Standards per Area Population	Existing Facilities	Needs Compared to Existing	Deficiencies per Standards
Archery Range (incl private, commercial)	50,000	0.04	0	-0.04	Only if local demand
Baseball Fields***	5,000	0.38	1	0.62	None
Basketball Courts, outdoor***	5,000	0.38	1	0.62	None
Bicycle Trails (miles)	40,000	0.05	only roads	-0.05	Yes-to meet stated local demand
Golf Courses (private, commercial)	25,000	0.08	in Township	-0.08	None
Horseshoe pits	7,500	0.25	1	0.75	None
Ice rinks, indoor	100,000	0.02	1	0.98	None
Ice rinks, outdoor	20,000	0.09	0	-0.09	Only if local demand
Picnic area/tables	200	9.44	14	4.56	None
Playgrounds	3,000	0.63	1	0.37	None
Rifle ranges (private, commercial)	50,000	0.04	0	-0.04	Only if local demand
Shotgun ranges (pvt, commercial)	50,000	0.04	0	-0.04	Only if local demand
Shuffleboard	7,500	0.25	1	0.75	None
Sledding hills	40,000	0.05	0	-0.05	Available in Covington
Soccer fields	10,000	0.19	0	-0.19	Yes-to be met by new facility at school?
Swimming pools (outdoor)	20,000	0.09	0	-0.09	Yes-to meet stated local demand
Tennis courts (outdoor)	4,000	0.47	1	0.53	3rd St. Park facility needs repair
Volleyball (outdoor)	7,500	0.25	1	0.75	None
Boat launches (parking)	400	4.72	1	-3.72	Also available in Area
Campgrounds/Campsites	150	12.59	0	-12.59	Available in Township
Cross-country ski trails (miles)	10,000	0.19	1	0.81	None
Fishing access (feet)	100	18.88	Many	Sufficient	None
Fishing piers	100,000	0.02	1	0.98	None
Hiking trails (miles)	5,000	0.38	2	1.62	At school and around the area
Horseback riding trails (miles)	20,000	0.09	0	-0.09	Yes
Nature areas	50,000	0.04	1	0.96	None
ORV areas (acres)	7,500	0.25	0	-0.25	Yes
ORV trails (miles)	10,000	0.19	0	-0.19	Yes
Land open to snowmobiling (acres)	1,000	1.89	Many	Sufficient	None
Snowmobile trails (miles)	3,000	0.63	Many	Sufficient	None
Swimming beaches	25,000	0.08	1	0.92	None
Roller skating (incl commercial)	20,000	0.09	0	-0.09	None
**2007 Population Estimate, U.S. Census Bureau					
***Not including school facilities					
Source: Michigan Department of Natural Resources. 1986. *Building Michigan's Recreation Future*					

in public visioning exercises. These items were not mentioned during the creation of this master plan. However, an outdoor ice rink and sledding hill were mentioned as possibilities for the former football field location by the Recreation Building (shown as a slight deficit in the opportunity analysis). A roller skating facility is listed as a deficit, and the community has mentioned the need for a skate park or rollerblade trails.

Under-utilized recreation opportunities are evident in every portion of the Village. Many informal trails have spontaneously developed in the vacant lands surrounding the neighborhoods on the northeastern Village boundary. The line of bluffs paralleling the lakeshore in the northwestern corner of the Village would provide outstanding scenic and interpretive recreation opportunities. There is an opportunity to create interpretive gardens which would provide recreational opportunities but also help stabilize the slopes along Linden Creek in the east central portion of the Village. The Falls River provides opportunities for fishing and trail activities in the core and southern portion of the Village where facilities are currently lacking for the neighborhoods divided from the rest of the Village by US-41. Outdoor recreation activities in the L'Anse area include camping, hiking, fishing, hunting, cross country skiing, and snowmobiling. Trout streams criss-cross the landscape (see *Figure 3-15*).



Regarding regional recreational opportunities, Baraga County has over 100,000 acres of state and privately owned commercial forestland available for recreation such as trails. The Peter Wolfe Chapter of the North Country Tail Association is responsible for 140 miles of the North Country hiking trail through the Upper Peninsula of Michigan. Two sections of completed trail totaling approximately 6.4 miles thread through Baraga County, with a third section of trail under construction.

L'Anse area recreation, as reported in the Village of L'Anse, Township of L'Anse and L'Anse area Schools Recreation Plan of 2008-

2012, includes the following:

Waterfront Park

Approximately two-acre site on Lake Superior waterfront includes playground equipment, pavilion, picnic tables, grills, beach, underground watering system, restrooms, volleyball courts (regular and beach volleyball), band shell, and waterfront walkway with lighting. The Village developed a splash pad in this park that has become so popular, there is a need to enhance it. This Village owns and maintains this park.

Marina and Boat Launch

Approximately one acre special-use facility, located adjacent to the Waterfront Park and off Baraga Avenue. The Village-owned park includes docks, piers, and boat launch. The Village also maintains this facility.

Walkways

One walkway is located along Linden Creek starting at Lake Front Park and ending at Main Street which is the main business district. The walkway is concrete with benches and lighting. A second walkway is located along Lake Superior from Falls River to Division Street, and includes a concrete walkway, lighting, benches, and picnic tables. Both walkways are owned and maintained by the Village.

Figure 3-16: L'Anse Recreation

Third Street Park

Approximately one acre mini-park, located in the blocks between Third and Fourth streets. The Village-owned park includes tot baseball field, sandbox, swings, merry-go-round, monkey bars, play tires, and basketball and tennis courts. The tennis courts are in need of re-orientation because they face in an east/west direction, making visibility difficult.

School Play Lot and Tennis Courts

Approximately two acre site includes swings, slides, climbing apparatus, small basketball court, and tennis courts. This site is owned and maintained by the L'Anse School District and is located adjacent to the elementary school.

L'Anse Recreation Building (Ice Rink)

The facility includes artificial ice and warm-up area. The building is multi-use, housing such activities as car shows, roller-skating, art and crafts shows, and dances. The Village-owned and maintained facility is financed through U.S.D.O.I, DNR, and local funds.

Sacred Heart School Play Lot

The site is located west of L'Anse Avenue, is approximately one acre in size, and is owned and maintained by the parochial school. This location includes a play area with swings, slide, and merry-go-round.

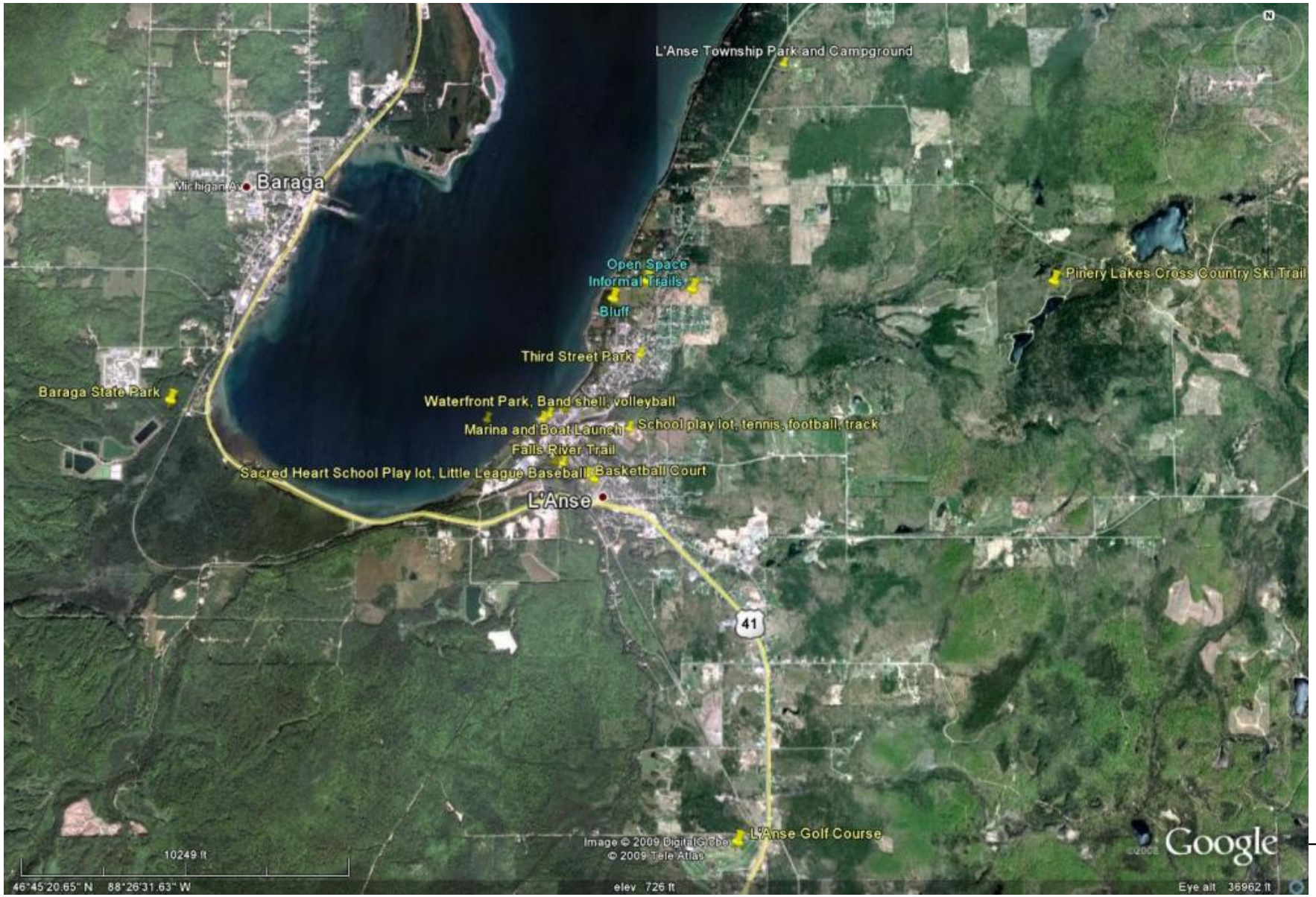
Little League Baseball Field

This one acre site is located on Sacred Heart School property and includes an improved field with dugouts and fencing.

Basketball Court

Located on Sixth Street, the facility is maintained by the Village of L'Anse with a twenty-five year lease on property from Sacred Heart. Church.

Figure 3-17: L'Anse Area Recreation



L'Anse Golf Course

Nine hole golf course with driving range located three miles south of L'Anse on US-41. The course is leased to L'Anse Township for a period of 25 years and is open to the public.

Pinery Lakes Cross-Country Ski Trail

Located north of L'Anse on Indian Cemetery Road, the property is owned by the Village and the trail is maintained by the Baraga County Convention and Visitor Bureau. There are several loops through pine woods totaling approximately 10 kilometers of novice and intermediate levels.

Falls River Trail

Three acres of trail located along Falls River on leased land from U.P. Power Company, maintained by the Village.

Snowmobile Trails

In addition to parks and other Village-owned recreational facilities, the Baraga County Visitor and Convention Bureau maintains over 150 miles of groomed trail in the region, and the sport has proven a major economic boost. Due to the large amount of snow received, the area is a magnet for snowmobilers and other winter sports enthusiasts.

Lake Superior

By surface area, Lake Superior is the largest fresh water lake in the world and is the biggest of all the Great Lakes. During the spring, summer, and fall months, the lake offers endless fishing, boating and swimming opportunities. In the winter, the lake rarely freezes completely leading to large snow falls around the lake. Keweenaw Bay on the other hand does freeze and is a very popular ice fishing destination.

Camping

The Village does not have any camp sites within the Village limits. There are two camp grounds within the county; Baraga State Park and L'Anse Township Park and Campground.

Little League Baseball at Sacred Heart.

Above: Falls River shelter. Below: L'Anse Township Park.

Baraga State Park

This park, located on U.S. Highway 41 overlooking Keweenaw Bay, Lake Superior has 116 sites on 56 acres. Activities in the park include cross country skiing, fishing, hiking, and metal detecting. There is also a picnic area, picnic pavilion, and playground.

L'Anse Township Park and Campground

Located 3 miles north of the Village of L'Anse on Skanee Road, the park offers beautiful views of Lake Superior and Keweenaw Bay. The park and campground offer 30 modern campsites with electrical hook-ups, shower building, pavilion, playground, Lake Superior beach and shoreline, firewood, RV dump station.

Scenic/Recreational Summary

Residents of the Village of L'Anse benefit from the abundance of recreational opportunities available in surrounding municipalities as well as local recreation opportunities. But ongoing planning is needed for the Village of L'Anse to realize the most benefit from recreation expenditures by also becoming a recreation destination. Funding must be allocated in a manner that most closely meets the changing needs of the population base while addressing visitor opportunity. The scenic resources associated with the Village's location help to ensure visitor interest. Carefully targeted expenditures on facilities and promotional activities will improve sustained interest and maximum utilization of Village facilities. The Village can best utilize limited resources by creating recreation goals that complement economic and community development goals, and carefully choosing strategies to increase facility utilization and decrease ongoing costs.

L'Anse Waterfront

The waterfront is recognized and valued as one of Village's greatest assets for both residents and visitors. Because of the economic development benefits relating to the waterfront and the important ties to Downtown, this area merits priority attention and future enhanced investment. Careful development planning is needed to ensure maximum benefit. Collaborations with neighboring jurisdictions expand opportunity.

Opportunities include preserving or enhancing:

- ***Waterfront views***
- ***Public access to the water***

Opportunities for additional facilities on the waterfront:

- ***Enlarged public park and marina with necessary parking facilities. Shower and toilet facilities at the marina.***
- ***Farmer's Market***
- ***Recreational trail network***
- ***Kayak lockers/water trail stop***

The waterfront is recognized and valued as one of Village's greatest assets for both residents and visitors. Because of the economic development benefits relating to the waterfront and the important ties to Downtown, this area merits priority attention and future enhanced investment. Careful development planning is needed to ensure the preservation of this resource. Collaborations with neighboring jurisdictions expand opportunity.

Summary of Recommendations: Natural Environment

1. Pursue techniques to extend the growing season and provide supplemental heat for purposes of growing food. One option may be to utilize waste heat from the L'Anse Warden Electric Plant or CertainTeed.
2. Celebrate L'Anse as a four-season community. Create a marketing program to address faulty perceptions about U.P. climate and lifestyles, and create a marketing program to entice people from southern states and regions to enjoy the abundant water resources and escape the summer heat and humidity by spending time in the L'Anse area.
3. Participate in a collaborative watershed planning initiative and acquire funding for the protection of water resources (such as CELCP). Pursue acquisition of properties or easements (along coastal/bay shorelines or river mouths) when necessary to protect sensitive environmental and water resources. This may be coordinated with an interpretive cultural or scenic trail project utilizing other funding sources, and should be supported by a shoreline management overlay zoning district to provide standards for environmental protection.
4. Implement good land management practices and regulations to control inappropriate shoreline development (that which has the potential to disrupt natural processes, threaten beach creation and replenishment, exacerbate erosion, or otherwise degrade water quality).
5. Work with the Keweenaw Bay Indian Community, appropriate organizations from Michigan Technological University, area watershed partnerships, and other interested parties to identify priority areas and design a CELCP project (Coastal and Estuarine Land Conservation Plan) as needed to protect high quality, sensitive coastal areas and natural communities, and to promote coastal cultural heritage areas.
6. Trail Development
    - Work with the KBIC to develop a scenic/recreational/interpretive trail along the entire length of Keweenaw Bay from the Village of Baraga, through the Village of L'Anse, and up to Zeba
    - Develop scenic/recreational/interpretive trails along the Falls River from Keweenaw Bay to the old powerhouse.
    - Other trail opportunities include cross-country ski trails, snowmobile trails, ORV trail network, wildlife and birdwatching nature trails, and scenic trails and boardwalks along the bluffs.

- Trail and development plans should consider avoidance of nesting areas and habitat for area threatened and endangered species.

7. Other tourism opportunities include an auto touring route linked to trail systems and historic sites.
8. Look for opportunities to expand the Waterfront Park along the shoreline. Consider adding picnic facilities.
9. Marina enhancements include shower and toilet facilities and additional parking. Consider adding a kayak locker to facilitate a water trail stopping point.
10. Create multiple mini-parks closer to neighborhoods to serve specific population segments.
11. Consider creating an outdoor ice rink and sledding hill at the former football field location by the Recreation Building.
12. Incorporate roller blading opportunities by creating multi-use paths.
13. Expand the marina to accommodate more boats.
14. Create a scenic bluff trail with interpretive gardens and historic signage.
15. Create interpretive gardens along the steep portions of Linden Creek and the Falls River to stabilize slopes and aesthetic enhancement opportunities.
16. Re-orient the Third Street Park tennis courts to improve visibility.
17. Determine the feasibility of creating a sports fishing tourism opportunity in collaboration with KBIC and Baraga Village.
18. Look for innovative ways to finance open-space acquisition and preservation, especially of areas along the shoreline or river mouths. These may include local sales tax, real estate transfer tax, impact fees, bonds, income tax credits, user fees, and special motor vehicle taxes.
19. Utilize volunteers to create a database of sensitive environmental areas and scenic resources/views. This will assist in acquisition strategies, and marketing/promotion.
20. Download pictures and videos of area natural features, community events, and special places to Google Maps or Google Earth.

Chapter 4: Community Visioning

The Process

Community visioning as part of a planning exercise is important in that it allows citizens to buy-in to the plan and perhaps assist with implementation. It also gives them a voice and chance to be heard. It allows public officials to hear from a more balanced array of interests before making decisions, and to share decision-making authority to bring about actions and resource commitments. It also helps ensure mutually supportive decisions between public and private entities. It sends a message of collaboration and focus to potential funding agencies.

Public participation session.

The 2011 L'Anse Master Plan community visioning process was extensive, and included a review of previous County attitudinal surveys, L'Anse Planning commission surveys, community visioning sessions, stakeholder and youth input.

For this 2017 Master Plan update, the Planning Commission reviewed the extensive input and determined that significant changes to the community had not occurred, that the community vision has remained the same, and that no additional public visioning was needed for the Master Plan update.

Summary of Village Challenges and Opportunities

Following is a brief summary of the public input for this master plan. By far the most frequent comments for enhancement across the economic, built, social, and natural environments were for public recreational trails and trail networks of various kinds.

County Input

Overall, waterfront development, recreation, and tourism opportunities including trails and bike paths are viewed as high priority investments within the County. Other priorities follow:

Economic Environment

- Collaborate for economic development area-wide.

- Promote tourism strengths including water resources, changing seasons (fall colors), national and state parks, local waterfront parks, wild berries, beaches, hunting and fishing, wildlife, Sturgeon Gorge, area trails, area history, and unique assets like the sweet rolls at the Hilltop Restaurant.
- Capitalize on economic development opportunities in collaboration with area governments including KBIC. Utilize resources at Michigan Technological University. Opportunities include internet businesses, business incubators, value-added forest products, metal fabrication, fiberglass manufacturing, and unique shops. Assets include the publicly-owned waterfront, labor force, and work ethic. Special concerns include road restrictions, distance to market, a need for balanced growth, and environmental management. Strategies include a marketing plan. There is a concern for more jobs

Built Environment

- Enhance area signage and address wayfinding.
- The public has strong support for historic site preservation.

Social Environment

- Address citizen concerns with disposal of household items, appliances, and household chemicals. Improve local recycling options.
- Address the recreational needs of an older population.

Natural Environment

- Traditional opportunities such as sight-seeing, beaches, cross-country skiing, hiking, fishing, hunting, and snowmobiling were recognized as assets.
- Protect public access in lakefront development.

Village Input

Economic Environment

- Ideas for collaboration include cooperative regional marketing, community round-tables, and association of Townships.
- The community is interested in sport-fishing opportunities, and suggested a marketing theme, "There's something fishy about L'Anse . . ." Promote green-based recreation like bird and wildlife viewing.
- Start an initiative to brand L'Anse as a Destination and to create a unique identity. Perhaps a "Community of Choice", or a place where people want to stay. This means embracing diversity, providing a place for everyone, and celebrating the waterfront. Fight "Cruise Control Syndrome" where people pass through with better welcome signage (maybe an interactive digital sign with information on events along the highway).

- Collaborate to enhance the business and educational environments.
    - Extend local business hours and provide local entrepreneurial assistance. Support internet businesses and value-added opportunities as opposed to raw materials. Look into closed-loop industry systems.
    - Match curriculum to local skill needs to promote relevancy and further education in those who are not college-bound.
- Promote a local food system.

Built Environment

- Implement wayfinding and interpretive signage and information kiosks or maps.
- There is a need to maintain housing affordability and to address the transitional residential needs of seniors. Look at the feasibility of an assisted living facility within walking distance of Downtown. Survey respondents (who were generally an older age demographic) chose the top housing opportunity as assisted living. Most people wish to stay in the area if they can.
- Property maintenance assistance may keep more people in their homes and would improve community aesthetics.
- Spruce up public facilities and add picnic facilities. Continue to invest in the waterfront, Downtown, and marina.
- Promote context-sensitive mixed-use development (including lodging and evening entertainment) in the Downtown.
- The Village has room for expansion in two industrial park areas.
- Enhance public access to water resources and invest in local pedestrian and bike trail networks.
- Continue investments in streetscapes and sidewalks.
- Facilitate infill development.
- When surveyed regarding their opinions on big box, national chain retail development, Village residents had high agreement that these retailers should have to conform to the community's vision for good design and appropriate location, although they were generally not opposed to this type of development. Village residents generally support highway commercial development but were in high agreement that more improvements in landscaping and screening of parking and equipment must be required.

Social Environment

- There is a need for a family, community, or social center. If the courthouse is vacated, this may be a good place.
- Address the need for additional cemetery space.

Chapter 5: Land Use Planning Trends and Critical Development Issues

Land use is impacted by transportation, the natural environment, economic base, conservation and preservation interests, land ownership, and the desires of the public. Local government action at all levels (federal, state, county, and local) plays in important role in land use through regulation and public investment. Public investment in schools, parks, roads, water and sewer extensions, etc all provide opportunity for development and will often determine what type of development will occur. The natural environment impacts land development because of topography, soil conditions, drainage potential, and tract size. Conservation land placed into public ownership provides recreational uses. Local governments are endowed with the ultimate authority for controlling land use through zoning laws and building and sanitation codes. This establishes parameters within which development can occur. It is important that future land use decisions be realistic in light of the ability of local governments to provide essential public services in a fiscally responsible manner.

Regional Land Use Patterns

The Village of L'Anse is surrounded by L'Anse Township and Lake Superior. It is therefore very important to coordinate long-term planning initiatives with L'Anse Township in particular, along with other municipalities in Baraga County such as the Village of Baraga. It is also important to coordinate planning efforts with the Keweenaw Bay Indian Community, which has a strong presence in both L'Anse Township and Baraga. L'Anse Township has a Master Plan and Zoning Ordinance, and future coordination efforts should focus on joint concerns, opportunities, and processes to ensure a more comprehensive view and plan for a continuous and complimentary development pattern. It is also important to create a consistent regulatory environment to increase opportunities for shared enforcement, and to encourage development through consistent practices.

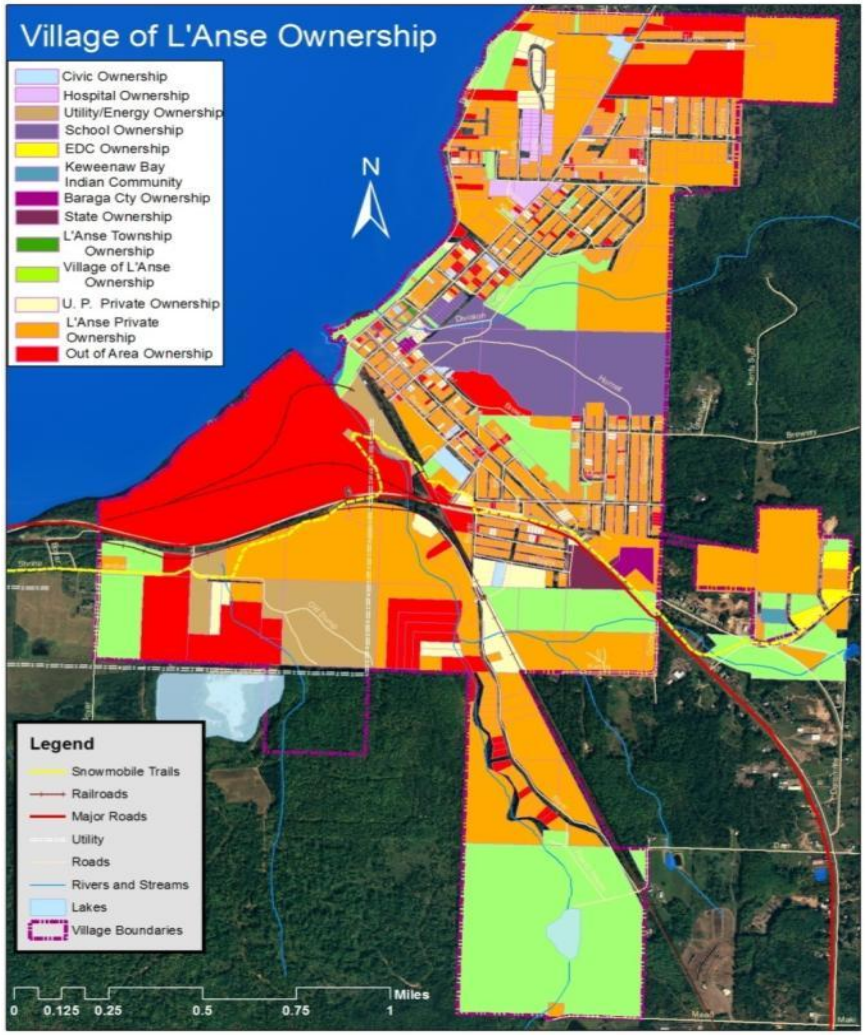
Neighboring Jurisdictions

L'Anse Township

L'Anse Township surrounds the Village on three sides. Much of the land in the Township is in State or Federal ownership, or placed in Commercial Forest Reserve, so opportunities abound for open space and natural resource-based recreation. Most development potential is located along the US-41 corridor, along the Lake Superior shoreline, and adjacent to Village boundaries. Current land uses in the

Township are generally complimentary to those of the Village, although agricultural opportunities could be enhanced to serve both municipalities. The relocation of Baraga County Memorial Hospital from the Village to the Township changed some office uses and traffic away from the Village. Uses along the US-41 corridor leading into the Village are generally a mix of commercial and single-family residential. This corridor is important as a gateway to the Village and is an opportunity for enhancement activities. The Township is a source of natural resource and recreation opportunities to compliment those available in the Village. Large commercial development opportunities may be drawn to the Township due to the availability of vacant land, although the Village has available land on its western border along the corridor between the Villages of Baraga and L'Anse.

Figure 5-1: Village property ownership, 2009



Keweenaw Bay Indian Community

The L'Anse Reservation of the Keweenaw Bay Indian Community (KBIC) consists of a little over 92 square miles, divided into about 68 square miles in L'Anse Township, 19 square miles in Baraga Township, 2.5 square miles in Arvon Township, 2 square miles in the Village of Baraga, and 0.5 square mile in the Village of L'Anse. The majority of development on the L'Anse Reservation is concentrated in and around the Village of Baraga, portions of L'Anse Township and Baraga Township bordering the Village of L'Anse and Village of Baraga, and the community of Zeba north of L'Anse. KBIC does not currently have zoning regulations, and allows lands that are not directly controlled by the Tribe to remain subject to existing regulations of associated jurisdictions within reservation boundaries, including Baraga Township, L'Anse Township, and the Village of L'Anse.

Factors Affecting Land Use

Some factors influencing land use include the public interest, transportation infrastructure, land ownership, land value, natural environmental conditions, and economics. These factors are discussed in relation to land use patterns in the Village of L'Anse.

Public Interest

Land use is influenced by social or public purposes and interests such as conservation, recreation, preservation of heritage sites and viewsheds, development of a sustainable community, creation of affordable housing, provision of public services, and enhancement of job opportunities. It is the responsibility of local government officials to be aware of various local interests, and to enact balanced policies and regulations to further the public welfare. An extensive public participation process supported the framework for this master plan and future land use plan, and findings are documented in Chapter 4.

Transportation

The Village of L'Anse originally developed around its role as a transportation hub on a Great Lakes waterway. It served as a gateway for the export of natural resources. It is still very important to preserve and enhance the rail and port transportation modes in the Village, and to maintain the highway system that has become the most vital regional commercial link.

Land Ownership

The interests of property owners often dictate land use. Figure 5-1 details property ownership as of May 2009. It establishes ownership categories including civic organizations, the hospital, utility/energy companies, public schools, the local economic development corporation, KBIC, the County, the State, L'Anse Township, and the Village. The rest of the private property is categorized by the address of the owners, such as an owner with a L'Anse address, other Upper Peninsula address, or out-of-the-area ownership. Absentee ownership is sometimes a problem when it comes to property maintenance or redevelopment options.

As can be seen in the map, the majority of the out-of-area ownership in the Village is related to CertainTeed Corporation, which is obviously not an absentee owner situation. Most of the private land in the Village is owned by L'Anse residents, and almost all of the public land is owned by the Village or L'Anse school district. The Village owns key properties that are parks, public facilities, natural areas, and government buildings. Some land in Village ownership is also for the development of commercial, office, or industrial opportunity. The EDC and KBIC also own land for commercial or industrial opportunity.

Land Value

The amount that a person is willing to pay for property is related to its intended land use and locational qualities. Land in core areas with existing infrastructure and land suitable for development is generally valued highest. Land adjacent to water bodies is also generally high in value.

Natural Environment

The physical environment impacts land use through soil suitability, topographic, and hydrological factors, and limitations based on environmentally sensitive areas, wildlife habitat, and hazardous substances. These factors were explored in the Village Resources section (Natural Environmental Resources) and contribute to an understanding of future land use options.

Economics

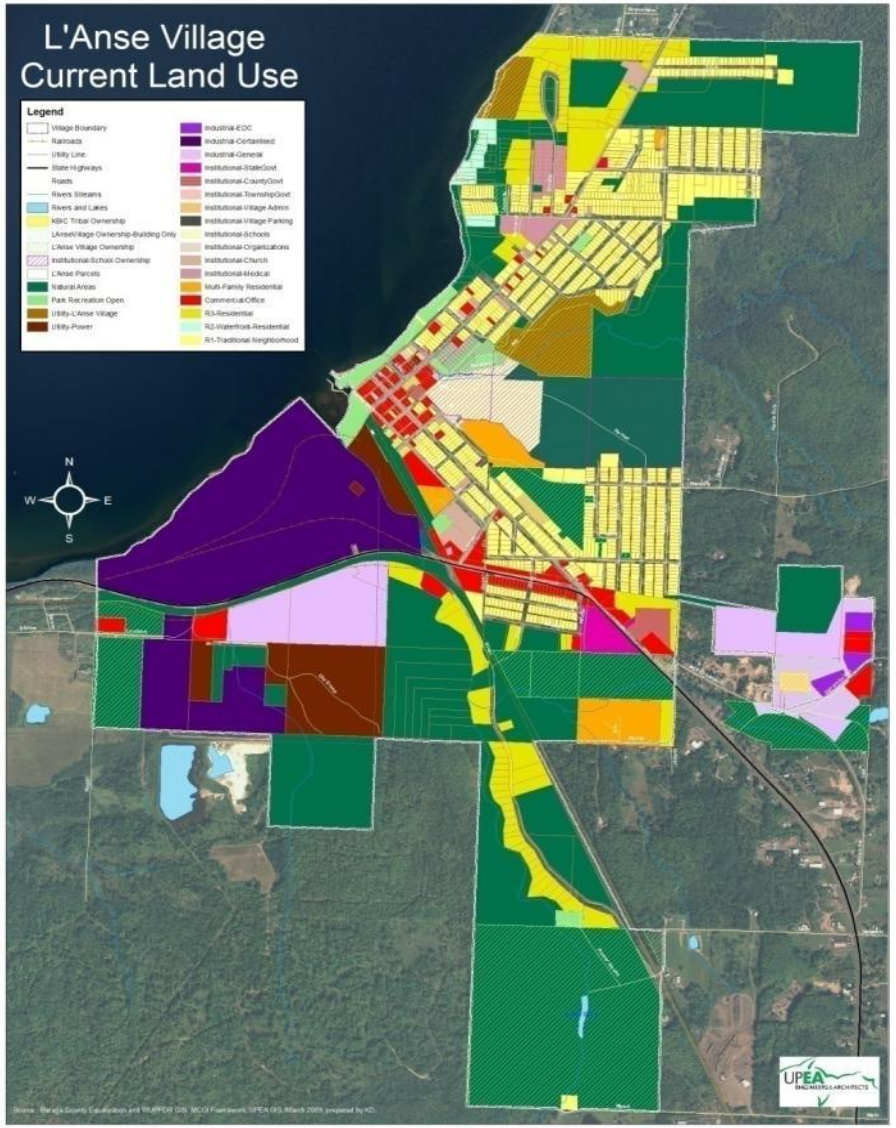
Economic considerations must often be weighed against other considerations as detailed above in determining land use patterns. The contemporary economic outlook impacts future development decisions. The drive for new job creation, the preferences of area investors, and the need for tax revenues impact local land use decisions. Property is usually developed or redeveloped into the land use that provides the highest return for the property owner while still meeting the restrictions of local land regulation. Local governments can impact future development trends by subsidizing a particular development type that may not yet be economically viable, yet is in the public interest.

Village of L'Anse Current Land Use and Development Patterns

Current land use is shown in detail on the Current Land Use map at right, including the following:

1. Natural Areas (dark green)
2. Park/Recreation/Open (light green)
3. Utilities (Village in light brown, other in dark brown)
4. Industrial (CertainTeed in dark purple, EDC in medium purple, and general industrial in light purple)

Figure 5-3: Current Land Use



5. Institutional (State government in bright pink, County government in medium pink, Township government in light pink, and Village government in medium tan, with Village parking in black. Schools in very light tan, and other institutions such as organizations, churches, and medical facilities in shades of grey/purple)
6. Multi-Family Residential (orange)
7. Commercial/Office (red)
8. Suburban-type Residential (avocado green)
9. Waterfront Residential (light turquoise)
10. Traditional Neighborhood (yellow)

The industrial areas are mostly confined to the industrial park on the southeast side of the Village, the south shore of Keweenaw Bay (CertainTeed), and the southwest portion of the Village, all near the highway corridor. The commercial area is mostly concentrated in two areas of the Village, along the U.S. Highway 41 corridor and in the Downtown. The Falls River corridor and sections of the northeast side of the village have been kept mostly as a natural area with some larger lot residential. The rest of the Village is a mix of residential, small commercial, and institutional buildings.

The Village is fortunate to have a compact development pattern that is well-suited for non-motorized forms of transportation.

Existing and Potential Land Use Conflicts

Because most of the high intensity land uses are located along the highway corridor where there is no adjacent residential development, these kinds of conflicts are minimal in the Village. Development has currently not impeded scenic views from the bluffs in the Village. Multi-family and high density housing is sufficiently buffered from other residential types. There are no land use conflicts with surrounding jurisdictions at this time.

There are concerns that land uses along the Falls River and Linden Creek may negatively impact water quality. These concerns should be addressed through appropriate buffer and preservation regulations, and through proper stormwater management practices along these water corridors. The Village also plans to implement mixed-use development in the core areas and along major corridors. This form of development will require regulations to provide appropriate buffers and operations standards to ensure continued compatibility.

Development and Redevelopment Opportunities

Higher intensity business and industrial development opportunities exist along the undeveloped western highway corridor area and in the current eastern industrial park area. There are still some undeveloped residential areas in northern portions of the Village.

There are some underutilized properties along the central portion of the highway corridor that could be redeveloped. There are also some underutilized buildings and parking lots in the Downtown area with redevelopment potential as well as properties along the waterfront in Downtown.

Summary of Land Use Considerations

Village land use policies will be consistent with Smart Growth tenets, which include creating a range of housing opportunities and choices; building walkable neighborhoods; encouraging community and stakeholder collaboration; fostering distinctive, attractive communities with a strong sense of place; making development decisions predictable, fair, and cost-effective; mixing land uses; preserving open space, farmland, natural beauty, and critical environmental areas; providing a variety of transportation choices; strengthening and directing development towards existing communities; and taking advantage of compact design.

The Village will implement land use policies that refocus a larger share of growth within existing developed areas already served by infrastructure. Policies will focus on long-range, regional considerations of sustainability and a regional view of community. The Village recognizes important roles for the public, private, and non-profit sectors as well as citizen participation in the development process.

The Village recognizes that sometimes public action is needed to stimulate redevelopment when the private market cannot feasibly provide the desired level of improvement. Village practices for effective and equitable redevelopment will include a clearly defined process for identification of redevelopment opportunities and partnerships that best serve the public interest; a fair, open, equitable, transparent means of choosing partners; achieving due process, and public purpose.

Chapter 6: Strategic Plan

This strategic plan is divided into specific plans for future land use, economic development, resource enhancement, infrastructure enhancement, zoning, and implementation. Each specific plan contains an introduction to policy considerations and strategies for collaboration. The policies presented support the goals and objectives selected to guide implementation in the Village of L'Anse. The Village Vision Statement forms the basis for all policies, goals, objectives, and strategies contained in the strategic plan.

The goals and objectives are like a Village "To Do" list that lets leaders, business owners, prospective investors, and citizens know what is wanted, needed, and supported. Goal statements reflect the needs, values, and desires of the community: they are like answering the question, "what do you want out of life?" Objectives are more specific and measurable tasks that may have a short-, mid-, or long-term focus leading to the accomplishment of goals.

Village Vision Statement

In 2025, the Village of L'Anse will be recognized as a "Community of Choice" that has embraced diverse opportunities and achieved community resilience. Residents, property owners, and visitors will experience high quality-of-life resulting from collaborative practices in support of healthy and sustainable economic, built, social, and natural environments. L'Anse will continue to be the place where people feel safe to put down roots and build for the future.

Future Land Use Plan

This portion of the Strategic Plan addresses policies, goals, and objectives for sustainable land development and growth. Content includes future land use policy, future land use descriptions and map, comparison of current and future land use, staging of growth, and potential partners for future development. This section addresses Goal #1: Smart Growth, and Goal #2: Sustainable Development.

Future Land Use Policy

The future land use plan was developed to be consistent with the input of residents as well as national, state, and regional policy and best practices as outlined in Chapter 5. It is designed to meet the future needs of the community for economic, social, and environmental sustainability.

Smart Growth and Sustainable Development Policy

Village land use policies will be consistent with Smart Growth tenets, which include creating a range of housing opportunities and choices; building walkable neighborhoods; encouraging community and stakeholder collaboration; fostering distinctive, attractive communities with a strong sense of place; making development decisions predictable, fair, and cost-effective; mixing land uses; preserving

open space, farmland, natural beauty, and critical environmental areas; providing a variety of transportation choices; strengthening and directing development towards existing communities; and taking advantage of compact design. See Chapter 5 for a more in-depth discussion.

Environmental Protection Policy

Chapter 3: Village Resources contains policy information on watersheds, coastal areas, wetlands, forests, fish, and wildlife in the section on Natural Environmental Resources.

The Village of L'Anse is located on the shores of the largest freshwater lake in the world, and many communities (both human and natural) depend on the quality and viability of this resource. While Lake Superior provides drinking water for human communities and habitat for natural communities, it is also a source of livelihood and recreational opportunity for some residents. Adopting and implementing policies similar to those above will help ensure the protection of Lake Superior and its feeder lakes and rivers throughout the area.

Future Land Use Descriptions

The following future land use descriptions support the above policies for sustainable land development. Categories include:

Protection Zone (Shoreline, Riparian, and Bluff)
Urban Forest Preservation & Recreation
Park and Community Recreation
Traditional Neighborhood Residential
Suburban Neighborhood Residential
Waterfront Residential
Cluster Residential Development
Mixed-Density Residential
Integrated Mixed-Use
Corridor Mixed-Use
Business Park / Light Industrial
General Industrial
Low Impact Development
School Institutional
Utility

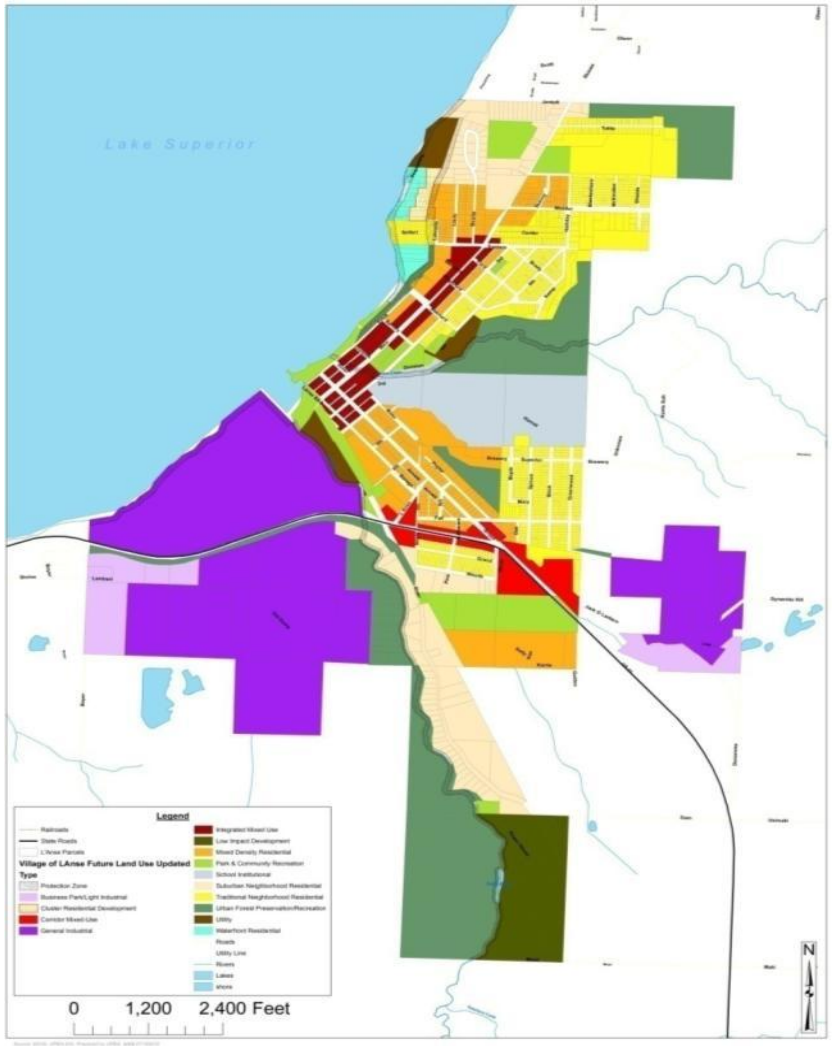
Figure 6-1 displays the Future Land Use Map. The *Protection Zone* (black dot areas) is intended to address sensitive environmental areas along shorelines, waterfronts, riverbanks, steep slopes, bluffs, etc, and to distinguish these areas by a need to implement low impact development or preservation principles. This future land use category is meant to preserve scenic views, reduce erosion potential, and protect water quality while making sure these natural areas contribute to the unique Village character and are available to future generations.

The *Urban Forest Preservation and Recreation* future land use category (solid dark green) is intended to protect un-subdivided natural areas. This allows the Village to retain some contiguous natural areas that can be utilized for greenbelts, wetlands, scenic areas, wildlife habitat, and low intensity outdoor recreation. Other uses may be accommodated at low density and low intensity.

The *Park and Community Recreation* future land use category (light green) designates areas of higher intensity outdoor recreation opportunity, park uses, and the cemetery.

The *Traditional Neighborhood Residential* future land use category (yellow) is "traditional" in the sense that these neighborhoods dominated the landscape during the original development of the Village. This area contains primarily one- to two-story single family homes on small lots within a network of well-connected, rectilinear (grid) street systems with sidewalks. Homes are interspersed with neighborhood offices or businesses, churches, and parks. Varied occupancy exists within these neighborhoods which are located in close proximity to the amenities and services necessary to urban living. These neighborhoods are of higher density and are characterized by pedestrian amenities such as sidewalks, street lighting, and compact development. In general, buildings closely frame vibrant streets that

Figure 6-1: Future Land Use



are designed for pedestrian convenience.

The *Suburban Neighborhood Residential* future land use category (tan) designates areas with primarily single-family residential uses on larger, sometimes irregular lots along curvilinear streets or cul-de-sacs. They are located in the transition areas between the denser residential areas and natural areas. Some of these neighborhoods currently lack pedestrian circulation systems such as sidewalks, which should be remedied in the future, but trail systems and amenities may be substituted. The feeling is of a private enclave of residences in a more rural setting separated from most other uses, although some neighborhood-serving mixed-use is acceptable.

The *Waterfront Residential* future land use category (light turquoise) consists of areas with one- and two-story single-family homes directly on the waterfront (Keweenaw Bay). Some are separated from the waterfront by a roadway, but most are placed close to the waterfront or the roadway. Structures generally include lakefront decks and porches to maximize the outdoor experience and connection with the lake. Homes directly on the waterfront may include accessory structures such as docks and boathouses. Lakeshore residential development is still a valuable and rare commodity in most communities where traditional industrial or commercial uses along the waterfront are in transition. This kind of development has the potential to attract investment. For this reason, it is important to protect property values and natural resources in this area. It is important to respect scenic public views and to enforce standards for the protection of water and environmental quality. It is important that runoff from impervious surfaces be drained toward bio-retention areas or riparian buffers to minimize adverse impacts on the lake. The use of permeable surfaces with filter areas should be encouraged.

The *Cluster Residential Development* future land use category (yellow with red dots) represents a form of development that is meant to achieve a balance of higher density residential development and allocated, set-aside conservation areas. Alternative home types, such as attached housing and accessory dwelling units, shall be accommodated to increase opportunity for compact development and maximize open space. This future land use will feature a pedestrian circulation system and shared community facilities that address amenities not accommodated in the small homes. Sensitive natural features will be integrated and preserved along with habitat areas. Intensified environmental protection, landscaping, and screening principles will be applied. Low impact development principles will be utilized.

The *Mixed-Density Residential* future land use category (orange) is primarily an area with a concentrated mix of housing types including single-family homes, duplexes, quadplexes, apartments, and condominiums mostly within the Traditional Neighborhood context. Some neighborhood-serving non-residential uses that are compatible with residential formats are allowed for convenience of residents and to reduce necessary automobile trips. Varied occupancy exists within these neighborhoods which are mostly located in close proximity to the amenities and services necessary to urban living. This future land use is intended to promote a sense of community and neighborhood vitality. A framework of well-connected, grid street systems with sidewalks within a compact form allow the efficient provision of

infrastructure. A diversity of housing types for various income levels is encouraged. Pedestrian and bicycle circulation is very important in this area.

The *Integrated Mixed-Use* future land use category (brick) includes the Downtown with branching areas along Broad Street and Main Street up to Eastern Street. Structures primarily have shallow setbacks with sidewalks separating the structure from the street. Building forms include generally one- to three-story commercial structures or residential structures (although greater heights may be allowed), some of which have been retrofitted with commercial fronts. A mix of uses is accommodated including retail, commercial, office, civic, services, and diverse residential. The pedestrian landscape is of primary importance, as is accommodation of bicycle traffic with bike lanes and bike racks. Because of the linear nature of this mixed-use District, the provision of intermittent year-round public spaces is important to enhance social interaction and the pedestrian experience. Seasonal outdoor cafes contribute to the active vitality of this area. On-street parking should be maximized to support customer convenience and walkability. The requirements for off-street parking should be minimized to enhance the pedestrian landscape and ensure compatibility with the surrounding traditional neighborhoods. Landscape buffers should be utilized around the perimeter of surface parking lots. Snow management is very important in this area to ensure year-round economic viability.

The *Corridor Mixed-Use* future land use category (bright red) includes the US-41 corridor area which provides a concentrated and convenient location for larger regional- and local-serving auto-oriented uses. The area is characterized by development along a four-lane highway dominated by mostly auto-oriented uses, including some with drive-thru lanes. Surface parking must be accommodated but is preferably located in the rear of the property or screened or buffered from view. Access is generally from the highway but shared access is encouraged to preserve highway safety and function. Uses are primarily office and commercial. The area is intended to incorporate various transportation modes, including all season non-motorized connections (i.e. sidewalks, pathways, and trails) to increase the ease, safety, and convenience of walking and bicycling from surrounding neighborhoods. Future development or redevelopment will include improvements to the pedestrian realm, bicycle network, road crossings, and landscaping. Redevelopment will include the addition of trees, landscaped buffers, and bio-retention areas.

The *Business Park / Light Industrial* future land use category (light purple) is intended to be reserved for all-enclosed light industry and commercial uses in a park-like setting that respects natural resources by incorporating low-impact development standards and stormwater management best practices. Winter-city design principles will be implemented with all new development to enhance the pedestrian environment and ensure climate compatibility. Energy-efficient design and climate-sensitive and environmentally-friendly landscaping techniques will be rewarded through increased density allowances, stormwater credits, or other incentives. The planting and preservation of trees in this area is encouraged along with alternative energy infrastructure.

The *General Industrial* future land use category (dark purple) is for industrial service, manufacturing, bulk commodities, and marine uses with intense scale or high volume of activity. Few customers, especially the general public, come to the site. Outdoor storage areas for equipment or supplies may be necessary. This development needs access to minor arterials and collector roads, and roads will be designed to reflect heavier loads and expanded turning radii. Standards for appropriate screening, buffering, and reducing fugitive dust materials will be incorporated. Energy-efficient design and climate-sensitive and environmentally-friendly landscaping techniques will be rewarded through increased density allowances, stormwater credits, or other incentives. The planting of trees is encouraged to soften the impact of buildings of large scale or bulk and outdoor storage areas.

The *Low Impact Development* future land use category (dark green with red grid) provides for future low-impact development opportunity that preserves the integrity of the natural resources of the area. Passive outdoor recreation opportunities are preferred. Acceptable development practices include cluster or conservation development, minimal soil compaction and disturbance, protected natural water flows, riparian buffer areas, protection for sensitive environmental features, and minimal impervious surfaces. Structural standards include bioretention, stormwater recapture and use, infiltration practices, native re-vegetation, and pervious pavement with infiltration.

The *School Institutional* future land use category (grey) is reserved for a mix of uses supporting the L'Anse area schools. This may include office, recreation, business incubator, vocational, and affordable housing opportunities.

The *Utility* future land use category (brown) provides for the public or private generation of power or other public services.

Comparison of Current and Future Land Use

The Village of L'Anse is not currently undergoing rapid change, so current and future land use categories are not extremely different. The main difference is that a mixed-use category is incorporated to ensure diverse residential opportunities to promote a vibrant downtown, and to allow the continuation or development of neighborhood-serving non-residential uses. Mixed-residential types are promoted in more parts of the Village. Additional residential development is planned for northern portions of the Village, and additional business/light industry or general industry is planned in the two areas off the corridor at the western and eastern sides of the Village. Most natural areas are designated to remain natural, including the areas along the Falls River and Linden Creek.

Staging of Growth

Growth strategies should prioritize infill and redevelopment opportunities before greenfield development if the use can be successfully accommodated in infill areas. Priority infill development areas include the former Hospital property on Main Street, select properties along the lakeshore in Downtown, underutilized parking lots in Downtown, and vacant structures along the US-41 corridor.

Goals and Objectives for Future Development

GOAL #1: SMART GROWTH (SG)

Ensure that new development follows the Smart Growth tenets and policies presented in this plan, such as prioritizing compact development and channeling new development to make the best use of existing infrastructure. This will enhance efficiency in public service provision and infrastructure maintenance, and help preserve natural resource lands.

Objectives for Smart Growth (SG)

Objective SG1: Catalyze a critical mass of mixed-uses (business and personal services, entertainment, civic, educational, and residential) in existing developed areas and in the traditional neighborhoods at key intersections along main corridors to reduce vehicular trips, promote walking, increase neighborhood interaction, and provide the necessary tax base to support valued amenities.

SG1.1—Provide **incentives** for ground-floor retail combined with upper-level residential uses, including the use of tax increment financing, low-income tax credits (affordable housing), tax abatements, façade improvement funds, and reduced developer fees.

SG1.2—Enable the Village to become a **long-term financial investor** in sustainable mixed-use infill development projects.

Objective SG2: Prioritize the rehabilitation or reuse of vacant and underutilized properties or the conversion of single-uses into mixed-use developments as a preferred strategy over new development.

SG2.1—Identify **priority redevelopment sites** and create a preferred redevelopment plan. Potential sites include underutilized lakefront and corridor properties.

SG2.2—Make rehabilitation or reuse projects easier, more lucrative, and less risky for the developer by providing **technical assistance** such as a professional site plan, environmental analysis, or marketing feasibility study for key development sites.

SG2.3—**Remove or mitigate obstacles** to redevelopment in infill locations.

Objective SG3: Foster a distinctive, attractive community with a strong sense of place.

SG3.1—Ensure that new development or redevelopment is **compatible** with the scale and architecture of existing properties (especially in the traditional, historic neighborhoods and Downtown) while preserving existing natural features as much as possible.

SG3.2—Require landscaping or public art or other such **aesthetic treatment along long, blank walls** to improve community aesthetics, and encourage pedestrian activity.

SG3.3—Enhance **transportation corridors**.

- Pursue streetscaping and aesthetic enhancements for the US-41 corridor through the Village, including pedestrian scale lighting, street trees, bicycle amenities such as parking facilities, bicycle lanes, and wayfinding and gateway signage (implement as the roadway is redeveloped).
- Phase out billboards (off-premise advertising) in the Village in order not to detract from the scenic beauty and aesthetic quality of the public space, and regulate corridor signage to be more consistent in appearance.
- Implement access management principles to support non-motorized transportation elements and create a safer, more aesthetic highway corridor while preserving function and capacity of the highway system.
- Require buffers such as bermed landscaping areas or masonry walls between all non-residential uses abutting residences so as to minimize light pollution from car headlights and other disturbances.
- Require safe, attractively landscaped pedestrian paths from all public sidewalks to the front entrance of commercial uses.
- Extend the façade improvement program to corridor businesses to improve gateway image.
- Improvements to surface parking areas should include landscaped areas and trees to improve stormwater management practices, reduce strain on the stormwater system, and improve visual impact. Care should be taken to design these areas to accommodate snow storage while protecting plants.
    - Screen all parking areas visible from the public space or residential uses with 4' masonry street walls or appropriately landscaped buffers to create a more visually pleasing environment and preserve adjacent property values.
    - Encourage the use of permeable pavement systems for on-street or off-street parking surfaces to enhance stormwater management systems.
    - Connect adjacent parking lots when possible to facilitate easy access without returning to the highway corridor.
    -

SG3.4—Preserve and enhance the utilization of **core mixed-use areas**.

- Continue to create attractive streetscapes along major roadways leading to downtown and destination attractions (including attractive and pedestrian-friendly public infrastructure and wayfinding signs). Incorporate this in every new development or street reconstruction project.
    - Improve streetscapes to include downcast (dark-sky compliant) pedestrian-scale lighting, landscaping, street trees, and pedestrian walkways.

  - Plant street trees during the reconstruction of streets and in all new development. Space no further than 30 feet on center and plant in generous tree wells with structural soils.
  - Utilize energy-efficient fixtures when possible.
  - Utilize permeable or recycled paving material when possible, especially in low traffic areas.
  - Use native or edible landscaping at every opportunity.
  - Integrate bike lanes (at least 4' wide, with 5' lanes next to on-street parking) and bicycle parking facilities. If there is only room for a bike lane on one side, utilize them on the uphill side for climbing lanes.
- Create focal points and gathering spaces (a series of "outdoor rooms") for commercial/entertainment/recreation opportunities in the core mixed-use areas.
- Protect existing tree stands in the core mixed-use areas and neighborhoods with a tree preservation ordinance and volunteer tree planting campaigns.
- Encourage adaptive reuse of vacant structures in the core mixed-use areas, particularly underutilized properties along the waterfront which have the potential to be redeveloped into prime residential condos or attached housing units along with mixed-use retail, office, service, educational, and civic uses.
- Implement sign regulations to ensure compatibility in size, placement, and materials of signs in the core mixed-use areas.
- Continue the Façade Enhancement Program in the core mixed-use areas.
- Larger setbacks of no more than 20 feet should be allowed for streetside outdoor cafes and patios in core mixed-use areas.
- Enhance parking areas.
  - Improvements to large parking areas should include landscaped areas and trees to improve stormwater management practices, reduce strain on the stormwater system, and improve visual impact. Care should be taken to design these areas to accommodate snow storage while protecting plants.
  - Downtown parking areas should include landscaping on the pedestrian edge as well as a short wall or fence of iron or masonry materials to buffer vehicular areas from pedestrian areas, or parking should be placed to the rear or sides of buildings to preserve interaction between pedestrians and store fronts.
  - Permeable pavement systems can be utilized for on-street or off-street parking surfaces to enhance stormwater management systems.
  - Connect adjacent parking lots when possible to facilitate shared parking.
  -

SG3.5—Improve **residential neighborhoods**.

- Preserve existing traditional neighborhood form and housing affordability, which are currently very valuable niche assets in the Village.

- Improve enforcement of blight and rental-inspection ordinances and utilize Municipal Civil Infractions.
- Encourage maintenance/upkeep of properties with incentives and volunteer efforts.
- Improve maintenance of infrastructure/roads in the neighborhoods to encourage private investment.
- Add small neighborhood parks, gathering areas, trails, and community gardens as needed within neighborhoods. Use edible landscaping and native plants when possible.

SG3.6—Enhance **civic spaces**.

- Develop a comprehensive community wayfinding system to connect people to local history, scenic views, unique natural features, and featured venues.
- Develop an attractive western community gateway utilizing landscaping and signage to create a community focal point and identity in the vicinity of L'Anse Avenue.
- Update amenities with public seating, water walls, fire pits, etc.
- Utilize civic spaces to grow food for the community, such as fruit or nut trees or shrubs.
- Provide bicycle parking facilities.
- Create and maintain community/neighborhood gathering places by encouraging adoption of these spaces by area private businesses or industrial organizations in partnership with the municipality, utilizing volunteers and community organizations for maintenance and oversight activities.

SG3.7— Develop a comprehensive program to **manage blight**.

- Update blight and property maintenance ordinances.
- Add provisions for energy efficiency to all building codes.
- Utilize municipal civil infractions for enforcement.

Objective SG4: Create walkable neighborhoods.

SG4.1—Plan and implement **pedestrian improvements** such as additional pedestrian connections, improved cross-walks, safe pedestrian access through parking lots, sidewalk improvements, and walkable designs as needed and with all new development or redevelopment.

- Add pedestrian amenities to the mobile home park and neighborhood of two long blocks just south of US-41. Create a mid-block connection and neighborhood park for the single-family neighborhood and add a pedestrian crossing over US-41 close to popular destinations.

- Add sidewalks along River Street to access the neighborhoods directly east of the school.
- Extend sidewalks to the northern-most neighborhoods.

SG4.2—Use trees and other **green infrastructure** to provide shelter, beauty, urban heat reduction, and separation from automobile traffic to provide a more encouraging pedestrian environment along main pedestrian routes to shopping areas, schools, and civic buildings.

SG4.3—Develop walking and biking **awareness and promotion programs** with walking guides, pedestrian-scale wayfinding signage, local walking events, street festivals, community walking tours, and safety information.

Objective SG5: Create a range of housing opportunities and choices.

SG5.1—Support traditional and **nontraditional homeownership models** such as limited equity cooperatives, mutual-housing, and community land trusts which operate as non-profit, resident-owned housing and offer ownership opportunities to lower income households while limiting the return from resale that they can receive from the housing. It contrasts with market rate cooperatives, where memberships can be transferred at market value.

SG5.2—Support efforts to preserve and expand **affordable housing opportunities** and increase density by facilitating **alternative housing formats** such as accessory dwelling units, garage apartments, granny flats, elder cottages, studios, cottage industry, home offices, cluster housing, manufactured housing, mixed-income housing, shared residences, and single-room occupancy developments where appropriate.

Objective SG6: Make development decisions predictable, fair, and cost-effective while balancing the goals of preserving open space, farmland, natural beauty, and critical environmental areas.

SG6.1—Utilize **site plan review standards and impact studies** to ensure that future industrial or large-scale commercial development does not negatively impact the environment or overburden existing infrastructure or public services. Consider negotiating with new large commercial or industrial development on greenfield sites to contribute to the provision the necessary new infrastructure to ensure adequate provision of sewage disposal, stormwater management, potable water, and other critical public health and welfare concerns including the appropriate buffers.

Objective SG7: Locate new development in or near existing developed areas to promote an efficient and compact pattern of development, maintain a sense of place, reduce the negative effects of sprawl, and reduce infrastructure and service costs.

SG7.1—Create **employment opportunities** near residential areas and in areas with existing public service infrastructure whenever possible. When not possible, maximize the connectivity of new development to existing roadways and residential areas.

SG7.2—Utilize a **grid system** of roads in all new development and connect new roads to existing roads to enhance circulation efficiency and preserve the capacity and safety of the highway corridor.

SG7.3—Limit corridor development to **activity clusters** that are within walking distance of residential development and are connected to core areas by multi-use paths or sidewalks.

SG7.4—Direct new industrial development to **existing industrial parks** whenever possible.

GOAL #2: SUSTAINABLE DEVELOPMENT (SD)

Promote development that is consistent with a future-oriented vision and that upholds an ethic of stewardship that encourages individuals and organizations to take full responsibility for the economic, environmental, and social consequences of their actions.

Objectives for Sustainable Development (SD)

Objective SD1: Support targeted development initiatives that address anticipated future needs of residents and changing demographic trends.

SD1.1—Address the needs of the **aging population** by:

- Accommodating alternative housing types through regulations.

SD1.2—Address the needs of **smaller households** by accommodating smaller housing types and changing the definition of family to allow non-related individuals to live together in a shared household. Support development of "missing middle" type housing.

SD1.3—Celebrate L'Anse as a **4-season community** with unique and abundant water resources, and create a marketing program to address faulty perceptions about the U.P. climate and lifestyles. This may entice people who are tired of the heat and humidity and homogenous climate of the south to relocate either permanently or seasonally to escape the heat.

Economic Development Plan

This portion of the Strategic Plan addresses policies, goals, and objectives for sustainable economic development. Content includes economic development policy and potential partners for economic development.

Economic Development Policy

Economic development policy is hard to summarize as it varies per time and place. However, a brief summary of the current areas of focus for the leading organizations is useful.

Collaboration: Potential Partners for Economic Development

Regional partners for economic development include the educational community (public schools, Michigan Tech, Keweenaw Bay Ojibwa Community College), workforce development organizations (Mi Works! Regional workforce board, Regional Skills Alliances), economic development organizations (Operation Action UP, Upper Peninsula Economic Development Alliance (UPEDA), Keweenaw Economic Development Alliance (KEDA)), Keweenaw Bay Indian Community, Baraga County Convention and Visitor Bureau, the regional planning commission (Western Upper Peninsula Planning and Development), County Health Department, area employers, and various other federal, state, and local agencies. Area civic and social organizations and citizens have a very important support role as well.

Goals and Objectives for Economic Development

GOAL #3: ECONOMIC SUSTAINABILITY (ES)

To achieve a sustainable economic development program that balances social and environmental considerations along with economic considerations in the production and distribution of goods and services, and implements strategies that address current needs along with the needs of future generations. To collaborate to enhance fiscal efficiency, stretch limited economic resources, and increase organizational capacity.

Objectives for Economic Sustainability (ES)

Objective ES1: Discover opportunities to create a spirit of cooperation between local governments in Baraga County that will build upon each community's strengths, contribute to regional growth, and address regional and global trends.

ES1.1—Participate in hiring a shared **Economic Development Professional** to perform business retention and attraction activities for the entire County and to implement economic development strategies of the Village Plan. Collaborate with KBIC economic development staff.

ES1.2—Maintain ongoing support for a shared **County website** and funding for a professional to oversee the creation of the site and to direct a team of students from area educational institutions or volunteers to maintain and update the web-site.

- Make available consistent data management templates for each municipality to be included on the site – this will present statistical data and progress toward community sustainability indicators.

ES1.3—Create a **Web-Based Marketing Plan** for the County or Village.

ES1.4—Hold **Semi-Annual joint planning commission/municipal board meetings** to assess progress toward regional goals. Include planning commissions and/or boards of surrounding jurisdictions and the Tribal Council of the Keweenaw Bay Indian Community.

ES1.5—Participate in **Semi-Annual meetings of all local government managers** and the KBIC Economic Development Director or other representative to discuss collaborations and common issues and opportunities.

Objective ES1.6: Discover opportunities to create a spirit of cooperation between citizens and community organizations to achieve plan goals.

GOAL #4: SUSTAINABLE TOURISM (ST)

Continue to support tourism development as a way to diversify the community economic base and attract potential new residents.

Objectives for Sustainable Tourism (ST)

Objective ST1: Build upon existing tourism/recreation assets.

ST1.1—Preserve and enhance **snowmobile and ATV trail system** by providing enhanced destination sites and amenities (yurt villages, gear storage, etc).

ST1.2—Participate in coordinated **promotion** of recreational and tourism opportunities within the County.

- Implement coordinated wayfinding signs and maps
- Create a walking route map with featuring destinations and amenities

- Create a community bicycle map to highlight routes, "rules of the road", problem areas, bike storage locations, and destinations
- Help update the County tourism literature
- Create updates for the County tourism web-site

ST1.3—**Update area parks** to anticipate the needs/interests of tourists along with the local population.

- Add landscaped islands and trees to the Marina parking lot to create a more pleasing transition to the Downtown, provide a more environmentally friendly way to manage stormwater run-off, and facilitate snow storage.
- Add shower, toilet, and picnic facilities at the Marina/Waterfront Park.
- Expand the Marina.
- Install kayak lockers and a water trail stop at the Waterfront Park.

ST1.4—Create an **improved gateway signage** amenity on the western approach to the Village.

ST1.5—Continue to **promote mainstay tourism** activities such as sport fishing, camping, hiking, hunting, and mountain biking.

Objective ST2: Create new tourism/recreation opportunities.

ST2.1—Cooperate with the KBIC plan to build a **multi-use trail** between the Aura and Sand Point, through the Village of L'Anse. Other potential connections include along the bluff in the Village of L'Anse, along the Falls River to the Powerhouse, and along Linden Creek.

- Include amenities such as lighting, fitness stations, and adjacent social interaction opportunities such as community gardens, fenced dog parks, community parks, etc.
- Create connections to regional attractions and work with KBIC to include their sites of interest as appropriate.

ST2.2—Promote **sport fishing** in the area—transform the area as a sport fishing destination. Work with KBIC.

ST2.3—Support the creation of an area **ORV touring trail network** on County roads and connected to State lands.

ST2.4—Create a historic/cultural **Auto Touring route** and map linked to trail system, area landmarks, and historic features, such as Ford sites. Feature activities such as bird watching, wildlife viewing, hiking, area waterfalls, scenic views, fishing, and hunting.

ST2.5—Promote **Bird watching & Wildlife viewing** and **berry picking tours**. Support with the necessary facilities and maps.

ST2.6—Create new **youth oriented facilities** such as a movie theater or skate park.

ST2.7—Create **interpretive trails & signage** for a riparian buffer project along Linden Creek.

ST2.8—**Hiking trails and fishing facilities** along the Falls River with the appropriate access easements, parking facilities, signage, and trail improvements.

ST2.9—Promote a variety of **winter tourism activities** such as dog-sled races, snowmobile races, ice-climbing, snow sculptures, dog agility on snow, outdoor dance parties, sledding hills, etc.

ST2.10—Create a coordinated effort to **promote the area to new markets**, such as creating a "Facebook" presence, or producing a web-based video highlighting unique community activities and places (such as on You-Tube).

ST2.11—Support **silent sports** such as kayaking, snowshoeing, mountain biking, cross country skiing. Reach out through direct contact to clubs and interest groups in other areas to coordinate exchanges of hosting activities, such as bike races, marathons, cross-country ski races, meditation retreats, etc.

ST2.12—Start a **rental bike program** downtown.

ST2.13—Assess the need for **unique parks and gathering spaces** within neighborhoods to cater to the social needs of specific population segments, including the very young and the aging. Examples include neighborhood trails, sculpture gardens, playgrounds, discovery zones, adventure playgrounds, and community gardens.

ST2.14—Explore possibilities for **Eco-tourism** in cooperation with surrounding jurisdictions. Create a unique outdoor experience that furthers understanding of man's interaction with nature, such as the study of wild medicinal plants, hunting or fishing, gathering, or orienteering.

Resource Enhancement Plan

This portion of the Strategic Plan addresses policies, goals, and objectives for enhancement of community resources. Content includes resource enhancement policy and potential partners for resource enhancement.

Resource Enhancement Policy

Cultural & Historic Resources

The Michigan Association of Planning (MAP) realizes that cultural and historic resources, when preserved, can substantially contribute to the quality-of-life and economy of a community. According to the MAP policy guide on Historic Preservation and Cultural Resources, MAP "supports efforts by local governments to integrate preservation into the land planning process, including incorporating preservation goals into the community master plan and reconciling and coordinating preservation policies with local development policies."

The Michigan State Historic Preservation office (SHPO) was created in response to the National Historic Preservation Act and is funded by the National Park Service. Michigan's SHPO provides technical assistance to local communities in their efforts to identify, evaluate, designate, and protect Michigan's historic resources. Historic resources are districts, buildings, sites, structures, or objects that exemplify a period of history. Their historical value may be achieved either through association with significant historical events; through association with the lives of persons significant in our past; by embodying a particular style, type, or method of construction; by possessing high artistic values; or by yielding, or being likely to yield, information important to history or prehistory.

The Village of L'Anse should work towards developing a policy to encourage the reuse and/or preservation of historic or cultural sites remaining in the Village. The Village can support this goal by educating developers and businesses about Federal and State tax incentives and funding for historic preservation or rehabilitation. The Village can also arrange for technical assistance for property owners who wish to apply for these tax and funding incentives. An advisory committee to help implement these programs and techniques would simplify the process for property owners and perhaps increase utilization of these programs.

Public Recreation Resources

Because of tightening local budgets, local recreation programs are widely influenced by, and dependent on, federal and state funding programs and their policy focus. The National Park Service administers two recreational funding programs through the Land & Water Conservation Fund. Since the beginning of the program in 1965, the Land & Water Conservation Fund has provided more than $14.4 billion dollars for federal recreation land acquisition and state and local government recreation grants. Local governments must apply for the federal funding through the Michigan Department of Natural Resources & Environment (MDNRE) Grants Management Division.

Local governments applying for funding must have an approved recreation plan on file with the MDNRE Grants Management Division. The maximum amount of a grant changes from year to year, however, funding is provided with a 50 percent match.

The state of Michigan also realizes the importance of recreation in communities, and has retained funds from annual revenues from the development of State-owned mineral resources to support local government recreation as governed by Article 9, Section 35 of the State Constitution and Part 19 of the Natural Resources and Environmental Protection Act, 451 PA 1994. The Natural Resources Trust Fund Act (Part 19 of 1994 PA 451) provides that local governments may apply for funding through the Natural Resources Trust fund as long as they have an approved 5-year Recreation Plan on file with the MDNR Grants Management Division and the Recreation Plan supports the project.

Social Environment & Quality-of-Life

Civic and cultural resources, including social organizations, events, and customs, play an integral role in defining a unique community. These resources contribute to a sense of meaning, unique place, and community pride. Organized social networks and enhanced cultural amenities improve the opportunity for community differentiation and attraction of new residents and businesses. They also provide a framework of support and involvement to help accomplish community initiatives. All elements of the built, social, and natural environment can contribute to community quality-of-life.

Public Services Resources

A community's quality-of-life and its ability to attract and retain economic growth often depend on the quality and quantity of community services that contribute to a sense of safety, well-being, peace, and security. A minimum level of services is expected and taken for granted, but a community that can go above and beyond in anticipating the unique and pressing needs of specific population segments can differentiate itself.

Public Facilities Resources

One important goal of local government leadership is to ensure the best level of public service provision and the highest quality of public facilities that the community can afford in a fiscally-responsible approach. This goal must be balanced with the many other important areas of focus for local governments.

Collaboration: Potential Partners for Resource Enhancement

It is increasingly important for local governments to collaborate on resource enhancement initiatives of all types. In today's mobile economy, municipal borders become less relevant as residents enjoy the assets and amenities of the larger area. It makes sense that a Township would partner with a Village to improve commonly-utilized resources and to get the most impact for the dollar. In addition to collaborating with federal and state agencies for funding and technical support, local governments can work together to improve services

and facilities, earning even greater funding support at the state and federal levels based on the collaboration. Local developers, businesses, and citizens also play an important role in supporting the physical and social infrastructure of a community.

Goals and Objectives for Resource Enhancement

GOAL #5: CULTURAL & HISTORIC RESOURCE ENHANCEMENT (CH)

Preserve important cultural and historic resources for the enjoyment and education of future generations. These resources provide a link to the past, enhance a sense of place, build community pride, and provide potential for increased tourism and economic vitality.

Objectives for Cultural & Historic Resource Protection (CH)

Objective CH1: Respect the history and character of existing "community landmarks", whether natural or built, and work to preserve and share these landmarks that increase a sense of community.

Objective CH2.—Create a **Heritage Trail Network** in the Baraga/L'Anse area (auto or pedestrian/bicycle or combination) highlighting and linking heritage sites, with interpretive signage and historic photos providing educational opportunities.

GOAL #6: PUBLIC RECREATION & SCENIC RESOURCES ENHANCEMENT (PR)

Preserve and enhance public access and enjoyment of unique natural amenities and create a community that supports active living and recreation environments.

Objectives for Public Recreation (PR)

Objective PR1: Create interconnected regional greenways/trailways systems connecting public parks and other recreation amenities as well as wildlife corridors.

PR1.1—**Develop scenic/recreational/interpretive multi-use paths** or bike trails along the **Falls River** from the Downtown to the old powerhouse park facility.

PR1.2—Collaborate in the creation of a **scenic/recreational/interpretive multi-use trail along the Keweenaw Bay** waterfront between Baraga and L'Anse and Aura.

PR1.3—Create a **scenic bluff trail or boardwalk** with interpretive gardens and historic signage.

PR1.4—Pursue **other trail opportunities** including cross-country ski trails, snowmobile trails, an ORV trail network, and wildlife and birdwatching nature trails.

Objective PR2: Utilize **Universal Access principles** in public recreation facilities.

PR2.1—Update public spaces, recreational facilities, and natural areas to provide increased opportunity for **Universal Access** (ADA compliance).

PR2.2—**Provide benches** along frequently traveled pedestrian routes between shopping and senior housing.

PR2.3—Make sure that most frequently traveled pedestrian routes are **free of obstructions** and snow in the winter.

PR2.4—Research programs for funding to **update homes for accessibility**, and provide educational materials to area medical care facilities and building supply stores.

Objective PR3: **Look for opportunities to enhance or expand existing facilities or add new facilities.**

PR3.2—**Marina expansion and enhancements** include more slips, breakwall extension, shower and toilet facilities and additional parking. Consider adding a kayak locker to facilitate a water trail stopping point. Expand the marina to accommodate more boats.

PR3.3—Create multiple **mini-parks** closer to neighborhoods to serve specific population segments.

PR3.4—Support creating an **outdoor ice rink and sledding hill** at the former football field location by the Recreation Building.

PR3.5—Incorporate **roller blading** opportunities by creating multi-use paths.

GOAL #7: PUBLIC SERVICES RESOURCE ENHANCEMENT (PS)

Provide for efficient public service provision and facility management to most effectively protect and utilize public investment.

Objectives for Public Services Resource Enhancement (PS)

Objective PS1: Enhance telecommunication services to facilitate the transition to the "new" or "knowledge" economy and create an opportunity to increase the education and skills of residents and link them to a global network.

PS1.1— Update regulations to support responsible development of **telecommunication infrastructure**.

PS1.2— Maintain an **updated Village website** to provide basic information on community services and events and to market and promote the community and its unique assets including business, arts, and crafts offerings.

GOAL #8: PUBLIC FACILITIES RESOURCE ENHANCEMENT (PF)

Make sure that all public facilities set a good example for sustainable design and operation and provide an essential public service in the most efficient manner.

Objectives for Public Facilities Resource Enhancement (PF)

Objective PF1: Fix-It-First: Do not add new infrastructure if current infrastructure or facilities are not maintained due to limited financial or organizational resources.

Objective PF2: Continue to create plans to conserve energy and increase efficiency in all public facilities and to adopt renewable energy technology when possible, thereby creating a model for private companies and residents to follow.

Objective PF3: Accessibility: Ensure that public buildings that serve a communal purpose, such as libraries, are accessible to all and are located where those that cannot afford to drive (or are unable to drive due to age or disability) can reach them.

Objective PF4: Enhance the aesthetics and function of parking areas.

Objective PF5: Perform marina improvements, including extending the break wall to provide additional capacity, and adding landscaped islands, trees, and natural stormwater management solutions to the parking lot to preserve water quality and provide a more pleasing transition to the Downtown.

Infrastructure Enhancement Plan

This portion of the Strategic Plan addresses policies, goals, and objectives for enhancement of community infrastructure. Content includes infrastructure enhancement policy and potential partners for infrastructure enhancement.

Infrastructure Enhancement Policy

Transportation Resources

Transportation is closely linked to land use, future development, economic growth, greenhouse gas emissions, environmental protection, accessibility, mobility, and equity issues. The priority of most transportation programs in the past was to ensure the integrity of the Federal and State highway systems, airports, and important ports. Today, federal and state governments have begun to place more focus on supporting alternative transportation modes to increase the diversity and security of the system and meet Smart Growth goals. There is also an increasing awareness that highways, as a part of public space, can contribute to and be compatible with other community goals including community aesthetics and connectivity. There is a growing awareness of the link between transportation (which is often controlled by federal or state agencies) and land use (which is usually controlled by local governments) and the need for collaboration and coordination.

Complete Streets has become a popular program in Michigan. *Complete Streets* means that in road planning, consideration is given to all of the legal users of the roadway during the planning and design phases to determine if any relevant accommodations are necessary or appropriate within the project. This legislation mirrors a national movement, but it does not mandate any local road agency adopt this policy or spend extra money for non-motorized facilities unless, for example, the county or village receives money from the Michigan transportation fund annually. If a village receives money from the Michigan transportation fund annually, that village shall prepare a five-year program for the improvement of qualified non-motorized facilities which when implemented would result in the expenditure of an amount equal to at least one percent of the amount distributed to the village in the previous calendar year, multiplied by 10, less the accumulated total expenditures by the village for qualified non-motorized facilities in the immediately preceding 5 calendar years. The program may be established in conjunction with or separate from already existing highways, roads, and streets and shall be established when a highway, road, or street is being constructed, reconstructed, or relocated unless:

- The cost of establishing the facilities would be disproportionate to the need or probable use
- The establishment of the facilities would be contrary to public safety or state or federal law
- Adequate facilities for non-motorized transportation already exist in the area
- The previous expenditures and projected expenditures for non-motorized transportation facilities for the fiscal year exceed one percent of that unit's share of the Michigan transportation fund, in which case additional expenditures shall be discretionary.

Although the policy is optional for local governments, the policy benefits local communities. The changes to Act 51 under P.A. 135 include consultation between counties, cities, villages, and MDOT when planning a non-motorized project affecting a transportation facility belonging to another road agency; non-motorized transportation improvements must meet accepted best practices; Act 51 agencies will notify one another when their five-year non-motorized programs are finalized; and non-motorized facilities contributing to complete streets are eligible for funding. The new *Complete Streets* section says that the State Transportation Commission must adopt a *Complete Streets* policy for MDOT within two years, and local road agencies must now consult with each other and agree on how to address *Complete Streets* for projects that affect a roadway under another road agency's jurisdiction – meaning that if MDOT or a road commission is planning a project within a municipality, they must inject the desires of the local community into the planning and design of the project. It also allows MDOT to provide technical assistance and coordination to local agencies in the development and implementation of their policies. MDOT is also required to share expertise in non-motorized and multi-modal planning in the development of projects within municipal boundaries. The *Complete Streets* program also allows agencies to enter into agreements with one another to provide maintenance for projects constructed to implement a *Complete Streets* policy. The Complete Streets policy is expected to be sensitive to local context where the needs vary according to the setting, consider the functional class of the roadway and projects costs that might lead to appropriate exemptions, and consider the varying mobility needs of all legal users of the roadway, and of all ages and abilities.

The Complete Streets legislation also amends *P.A. 33 of 2008, the Michigan Planning Enabling Act*, to say that "the general purpose of a master plan is to guide and accomplish, in the planning jurisdiction and its environs, development that satisfies all the following criteria", "includes, among other things, promotion of or adequate provision for one or more of the following:", (adding this criteria) "a system of transportation to lessen congestion on streets **and provide for safe and efficient movement of people and goods by motor vehicles, bicycles, pedestrians, and other legal users**". Another change is in section 33 of *P.A. 33 of 2008*, which says that "a master plan shall also include those of the following subjects that reasonably can be considered as pertinent to the future development of the planning jurisdiction:", and to this list is added, **"all components of a transportation system and their interconnectivity including streets and bridges, public transit, bicycle facilities, pedestrian ways, freight facilities and routes, port facilities, railroad facilities, and airports, to provide for the safe and efficient movement of people and goods in a manner that is appropriate to the context of the community and, as applicable, considers all legal users of the public right-of-way."**

Collaboration: Potential Partners for Infrastructure Enhancement

The Village should participate in cooperative efforts to address such transportation issues as access management on the highway corridor and Complete Streets policies. The Village also has a stake in regional transportation initiatives to preserve or enhance rail or port transportation modes and non-motorized transportation modes. The County Health Department (through State Health Department

funding) has access to funds for *Complete Streets* planning and implementation projects and *Safe Routes to Schools* projects. USDA Rural Development programs will continue to be of great assistance in improving community sewer and water facilities.

Goals and Objectives for Infrastructure Enhancement

GOAL #9: TRANSPORTATION ENHANCEMENT (TE)

Continue to grow and improve the transportation infrastructure that is key to economic growth in the region, including roads, bridges, non-motorized facilities, air service, and rail lines.

Objectives for Transportation Enhancement (TE)

Objective TE1: Participate in Regional Transportation Planning initiatives.

TE1.1—Explore the feasibility of **expanding freight and passenger rail** and shipping service to the County.

Objective TE2: Roadway System Improvements

TE2.1—**"Fix it First"** philosophy for roads. Do not add new infrastructure if current infrastructure or facilities are not maintained due to limited financial or organizational resources.

TE2.2—Institute **access management principles** for the highway corridor to protect safety and capacity of the highway system and preserve the value of the public investment in the road system. Incorporate into the zoning ordinance.

TE2.3—Utilize an **asset management program** to evaluate and document road conditions and inform capital improvement decisions. Training and software vailable through Michigan Tech LTAP services.

TE2.4—Maintain a 5-year **traffic count, accident history, and sign inventory**.

TE2.5— Maintain the connectivity level and integrity of the **traditional grid street pattern** into the future.

TE2.6— Implement **Complete Streets** standards and implement in all street projects.

Objective TE3: Strategies for other Transportation Modes

TE3.1— Preserve and protect community **rail service** to enhance community sustainability and resilience.

TE3.2— Preserve and improve **public transit** options.

TE3.3— Preserve and improve **harbor and port facilities**.

Objective TE4: Non-Motorized Transportation Improvements

TE4.1—Pursue funding support to create a **Non-Motorized Transportation Plan** to identify specific projects and phases in a systems approach that will help address the *Complete Streets* policy and enhance the Village's ability to get funding for these projects. Include all appropriate road agencies in the process.

TE4.2— Require **walkable designs** including non-motorized connections and bicycle facilities in all new development.

TE4.3—Incorporate complete, integrated, clearly-marked, **non-motorized transportation networks** as a priority project in Capital Improvement Plans.

- Provide multiple routes to community activity centers.
- Enhance the Pedestrian environment in all urban areas by orienting all roads to the pedestrian as much as possible.
    - Create continuous sidewalk networks within and between all neighborhoods and major activity centers.
    - Minimum width of 5 feet for new sidewalks (wider when bicycling and inline skating activities are combined with pedestrians).
    - When possible, utilize a buffer of 4-10 feet between the sidewalk and the curb (the wider the road, the greater the traffic speed, the wider the buffer). When a buffer is not possible, make the sidewalk wider to allow pedestrians to move away from the curb, or narrow the drive lanes to ten feet (on low speed roads) with a drive line encouraging vehicles to drive closer to the center line, leaving the extra pavement space at the edge as a buffer between cars and pedestrians.
    - Utilize on-street parking and bike lanes as functional buffers between pedestrians and traffic.
    - Provide adequate, downcast lighting at heights of 8-12 feet to enhance security.
    - Make sure that street furniture, landscaping, and sidewalk signs do not create hazards for visually impaired people or block pedestrian flow.
    - Add sidewalk connections between cul-de-sacs, dead-end roads, and roads that do not intersect.
- Minimize the number of driveways and curb cuts that create obstacles for pedestrians and bicyclists by incorporating access management principles such as shared driveways on arterials and major connecting streets.

- Create safe pedestrian crossings offering sufficient time for crossing, or narrow the crossing distance with bump-outs that bring the pedestrian into view beyond parked cars before crossing. Utilize striping or contrasting pavement colors to make these crossings more visible to motorists.
- Create safe, attractively landscaped pedestrian paths (minimum of 5' path) from all public sidewalks to the front entrance of commercial uses, utilizing special striping across parking lots.
- Implement alternative modes of transportation in road improvement projects. Consider adding bike lanes, pedestrian infrastructure, and street amenities to Main and Broad streets with road reconstruction and resurfacing projects.

TE4.4—Conduct **sidewalk inspections and schedule repairs** as part of annual maintenance operations and consider funding sidewalk maintenance and repair through special assessments.

GOAL #14: UTILITY INFRASTRUCTURE ENHANCEMENT (UE)

Continue to grow and improve the physical infrastructure that is key to economic growth in the region, including utility service, power generation and transmission infrastructure.

Objectives for Utility Infrastructure Enhancement (UE)

Objective UE1: Water System Improvements

UE1.1—A **Water System Master Plan** with a hydraulic model and a five year capital improvement plan should be developed for the water system.

UE1.2—**Elimination of dead end mains** by looping the existing water main system should be considered where possible.

UE1.3—Implement a **water valve exercise schedule**, which could be performed concurrent with the water main flushing program.

UE1.4—Hydrant flow and water system **residual pressure records** should be maintained for future ISO insurance rating documentation.

UE1.5—The present **water system map** for the Village should be updated annually with the records from construction projects completed.

Objective UE2: Stormwater System Improvements

UE2.1—Implement **Stormwater Management Practices** that include the reduction of impervious surfaces and utilization of biofiltration methods.

- Low impact development and innovative stormwater management standards should be incorporated into the zoning ordinance.
- Utilize shared parking techniques to reduce amount of impervious pavement and access drives.
- Reduce parking requirements in denser urban areas to be in alignment with walkability and Smart Growth goals.
- Reduce drive lanes to 10 feet and utilize extra space on roadways for on-street parallel (one or both sides) or reverse angle parking to help reduce the need for surface parking.
- Create on-site biological wastewater treatment systems with new development and redevelopment whenever possible, utilizing collected water for on-site irrigation. Treat all urban runoff on-site with biological retention and filtration areas.

UE2.2—Compile a **comprehensive storm sewer map** and consider televising the system to determine pipe composition and condition and prepare a preventive maintenance plan and schedule.

UE2.—Prepare a **maintenance budget**.

Objective UE3: Wastewater System Improvements

UE3.1—The Village should continue to implement a **sewer line cleaning maintenance program**.

UE3.2—Recommendations for plant improvements, collection system improvements and lift station rehabilitation are included in the **2008 comprehensive plan** and should be utilized for future planning of system upgrades.

UE3.3—The present treatment operations are operating at 70 percent of capacity. Future development expansion of large acreage industrial, commercial or residential property will need to be **evaluated for impacts** on the treatment process**.**

UE3.4—The Village should **annually update the sanitary system comprehensive map** with the records from construction projects completed.

Zoning Plan

This plan satisfies the requirement of P.A. 33 of 2008 for a local unit of government that has adopted a zoning ordinance to have a zoning plan within the master plan, including an explanation of how the land use categories on the future land use map relate to the districts on the zoning map.

Comparison of Future Land Uses to Current Zoning Districts

The following table contains a summary of how the future land use categories for the Village of L'Anse relate to the current zoning ordinance categories.

Table 6-1

Future Land Use	Current Zoning
Protection Zone (Shoreline, Riparian,	Reserve District
Urban Forest Preservation &	Reserve District
Park & Community Recreation	Underlying or Reserve District
Cluster Residential Development	None
Suburban Neighborhood Residential	R-1A, R-1B, R-2, RM-1, Reserve
Traditional Neighborhood	RM-1, R-1B, R-2
Waterfront Residential	RM-1
Mixed-Density Residential	R-1A, RM-1, R-1B, R-2, B-1, Reserve
Integrated Mixed-Use	B-1, RM-1
Corridor Mixed-Use	B-2, RM-1
Business Park / Light Industrial	I-1
General Industrial	I-2, Reserve
Low Impact Development	Reserve
School Institutional	RM-1, R-2
Utility	R-1A, Reserve, I-1

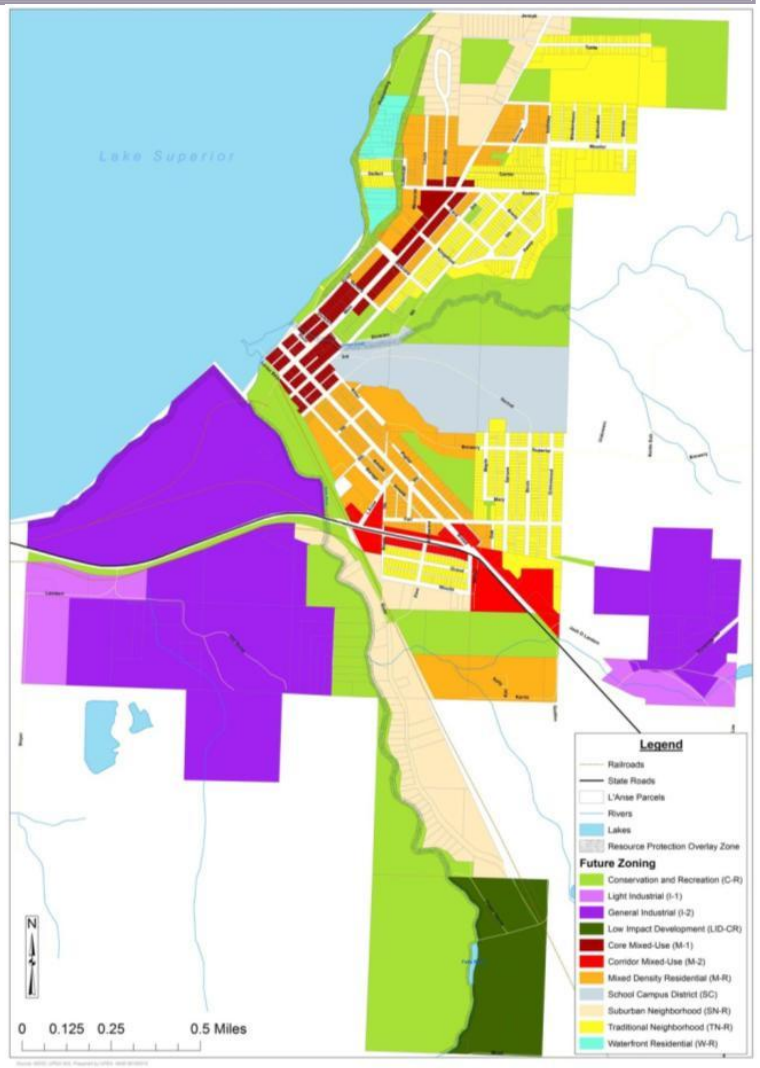
Zoning District Descriptions

In general, the zoning district descriptions are closely related to the future land use descriptions as presented in *Chapter 6: Future Land Use Plan*. In 2012, the Village of L'Anse updated the Village zoning ordinance to be compatible with the master plan.

The *Protection Zone* future land use corresponds with the *Resource Protection Overlay District (P-O, shown in black dotted ribbon areas)*, and is intended to address sensitive environmental areas along shorelines, waterfronts, riverbanks, steep slopes, bluffs, etc, and to distinguish these areas by a need to implement low impact development or preservation principles. This zoning district contains standards to help preserve scenic views, reduce erosion potential, and protect water quality. This zone is administered as an overlay district with additional standards that apply in addition to those of the underlying base zoning district.

The *Urban Forest Preservation and Recreation* and *Park and Community Recreation* future land uses is the *Conservation Recreation (CR, shown as bright green)* zoning district which is intended to protect both unsubdivided natural areas and publicly-owned lands generally used for recreation. This will allow the Village to retain some contiguous natural areas that can be utilized for greenbelts, wetlands, scenic areas, wildlife habitat, and low intensity outdoor recreation along with the higher intensity outdoor recreation areas and facilities. Environmentally-conscious regulations are intended to protect water quality and sensitive environmental resources by providing a buffer of low-intensity uses. Typical uses include forest and wildlife management, riparian buffers, parks, trails, and playgrounds. Other uses that may be allowed as special uses include recreational camps and clubs and low intensity, passive outdoor recreation. Other uses may be accommodated at low density and low intensity. These areas were previously accommodated in the underlying district or in the reserve district.

Figure 6-2: Current Zoning Districts



The *Traditional Neighborhood Residential* future land use category corresponds with the *Traditional Neighborhood Residential (TN-R, shown as yellow)* zoning district. This district is intended to preserve the existing character of the traditional residential neighborhoods and to guide redevelopment in a manner which is consistent and compatible with this form. Residential character is reflected around a framework of well-connected grid street systems with sidewalks. The pedestrian environment is enhanced by compact development on small lots, and homes set relatively close to the street with front porches and clearly defined front entrances. This district is intended to create and preserve viable and walkable neighborhoods and provide for all season non-motorized connections. This district is generally located where all of the facilities for urban living, including community sewer and water facilities, are available. Generally homes are located on small lots in pedestrian-friendly, compact neighborhoods where homes are of similar scale and character. The zoning principles will encourage pedestrian-scale form with appropriate amenities such as pedestrian-scale lighting, street trees, and street widths applying traffic calming principles while accommodating on-street parking. Landscaping treatments that improve stormwater management, manage winter micro-climatic conditions, and reduce wind chill are encouraged.

Uses include mostly one- or two-story single-family dwellings and two-family dwellings, but special uses of greater height may be allowed if they are designed to be compatible with the residential setting and achieve community goals. Other compatible uses may include home occupations contained within the dwelling; bed and breakfast establishments; family child care; state-licensed residential facility; churches and associated structures; parks and playgrounds; schools and libraries; small office uses; community- and publicly-owned buildings; and public utility buildings. Site plan review may be required for all uses other than single- and two-family dwellings.

The *Suburban Neighborhood Residential* future land use category corresponds with the *Suburban Neighborhood Residential (SN-R, shown as tan)* zoning district. This district provides for one- to two-story larger-lot single-family residential development and conservation subdivision (cluster or open space) development in areas that begin a transition to rural forest or agricultural areas and wetlands in the neighboring Township. This District provides for limited agricultural pursuits. It preserves a more rural character in areas characterized by the presence of natural landscape features, open space, and greater building setbacks. Cluster development preserving at least 50 percent of the site as open space is encouraged in this District. This District also allows for the production of food close to urban areas to enhance food security. Some of these neighborhoods currently lack pedestrian circulation systems such as sidewalks, which should be remedied in the future, but trail systems and amenities may be substituted. The feeling is of a private enclave of residences in a more rural setting separated from most other uses, although some neighborhood-serving mixed-use is acceptable. These uses were previously accommodated in a variety of districts including R-1A, R-1B, R-2, RN-1, and reserve.

The *Waterfront Residential* future land use category corresponds with the *Waterfront Residential (W-R, shown as turquoise)* zoning district. Typical development in this district consists of one- and two-story single-family housing along the shoreline of Keweenaw Bay, Lake Superior. This district contains special regulations addressing scenic views and water, shoreline, and environmental protection. Primary

importance will be placed on development patterns that preserve access and view corridors to the lake and protect the natural environment. Building design and site layout will reflect the importance of the relationship to the lakeshore. To protect water quality and access to natural resources, impervious surfaces will be minimized, paved space will be drained toward bio-retention or landscaped filter areas, and open space will be maximized. Riparian buffers will be maintained in this district.

The *Cluster Residential Development* future land use category corresponds with the *Conservation Subdivision (CS)* future special land use pattern. This special land use pattern is a form of development that may be permitted in various zoning districts. This development pattern has established land-use and design controls and a specific approval process to produce a distinctive higher-density form achieving specified community goals. This development is meant to achieve a balance of higher density residential development and allocated, set-aside conservation areas. Alternative housing types, such as attached housing and accessory dwelling units, shall be accommodated to increase opportunity for compact development and maximize open space. Height will vary according to location. This special land use pattern will feature a pedestrian circulation system and shared community facilities that address amenities not accommodated in the small homes. Sensitive natural features will be integrated and preserved along with habitat areas. Intensified environmental protection, landscaping, and screening principles will be applied. Low impact development principles will be utilized.

The *Mixed-Density Residential* future land use category corresponds with the *Mixed-Density Residential (M-R, shown as orange)* zoning district. This district is generally located where all of the facilities for urban living, including community sewer and water facilities, are available. This area offers a full range of housing choices including higher intensity multi-family residential uses, attached Townhouses and condos, mobile home parks, small lot single-family, and larger-lot single family generally in a Traditional Neighborhood context. District regulations are designed to encourage a suitable social and civic environment for family life and convenient access to essential products and services by including small, non-residential neighborhood-serving uses compatible with existing residential form. The appropriate amount of open space and recreational opportunities are provided. This district is intended to promote a sense of community and neighborhood vitality. A framework of well-connected, grid street systems with sidewalks within a compact form allow the efficient provision of infrastructure. This District is meant to encourage a diversity of housing types for various income levels, and to encourage affordable housing options. Provisions for pedestrian and bicycle circulation is very important in this District, as are related pedestrian-scale infrastructure and amenities. This area is meant to contain the highest concentration of residentially-compatible uses in order to provide vitality around core transportation routes and the Downtown.

The *Integrated Mixed-Use* future land use category corresponds to the *Core Mixed-Use (M-1, shown as dark red)* zoning district. The intent of the Core Mixed-Use future zoning district is to promote the establishment of a mix of vertically and horizontally integrated uses including retail, office, institutional, residential, and other non-residential uses while preserving traditional downtown and neighborhood character. This integration of uses will facilitate shopping and service opportunities close to neighborhoods, and will accommodate non-

motorized forms of transportation including public transit. Development in this district will provide for commerce at a density and scale that is appropriate for nearby residential areas, while placing primary importance on a safe and pleasing pedestrian environment. New development will be compatible within the context of traditional form. Structures primarily have shallow setbacks with sidewalks separating the structure from the street. Commerce is closely integrated with residences so as to encourage vitality and safety as residents keep eyes on the streets. Trees and vegetation are necessary to improve the pedestrian landscape and provide buffers from activity.

This district allows for a mix of uses within a single building, such as ground floor commercial or office, with upper story residential or office, but with no commercial use allowed above a residential use. Also contained in this district are a mix of housing types and residential densities along with other uses generally not to exceed four stories in height depending on location. Residential classifications in the Core Mixed-Use area may include a full range of appropriately buffered densities. Non-residential uses may include retail and service uses without outside storage areas, professional offices, banks, public buildings, schools, restaurants, taverns, and fraternal organizations. Appropriate buffers and careful layout of structures and parking are important in this area to ensure compatibility.

The pedestrian landscape is of primary importance, as is accommodation of bicycle traffic with bike lanes and bike racks. Because of the linear nature of this mixed-use District, the provision of intermittent year-round public spaces is important to enhance social interaction and the pedestrian experience. Seasonal outdoor cafes contribute to the active vitality of this area. On-street parking should be maximized to support customer convenience and walkability. The requirements for off-street parking should be minimized to enhance the pedestrian landscape and ensure compatibility with the surrounding traditional neighborhoods. Landscape buffers should be utilized around the perimeter of surface parking lots. Snow management is very important in this area to ensure year-round economic viability.

The *Corridor Mixed-Use* future land use category corresponds with the Corridor Mixed-Use (M-2, shown as bright red) zoning district. This district provides a concentrated and convenient location for moderately intense regional- and local-serving auto-oriented uses that are appropriately buffered from other mixed-uses along the major transportation route.

The Corridor Mixed-Use district is intended as a diverse, generally pedestrian-friendly environment that accommodates adequate vehicular access while creating an aesthetically pleasing entrance into the Village. This district serves as a vital transportation artery and a gateway connection to Downtown, and contains important crossroads intersections. This district accommodates regional-serving destination commercial and service uses. The district strategically and efficiently accommodates larger scale commercial along with residential uses while preserving a pleasing pedestrian environment.

Motorized access will be carefully designed and more intense activities will be carefully screened so as to place emphasis on the main building entrances. Access management principles such as reduced curb cuts, shared internal circulation, shared drives, and

frontage/service roads will be incorporated into regulations. The standards will reflect the community's desire to enhance the visual quality of the area by establishing minimum criteria for development while promoting amenities necessary to attract business, residents, and visitors. This district will provide opportunities for affordable and alternative housing, and will be designed to provide an appropriate transition into nearby traditional neighborhood districts. High density, urban living is encouraged and mixed with supportive neighborhood services. Non-residential uses may include auto-oriented uses such as gas stations, vehicle service and repair businesses and drive-through restaurants; large scale retail operations that require large outside storage or parking areas; public buildings; and hotels and motels.

Surface parking must be accommodated in this district but is preferably located in the rear of the property or screened or buffered from view. Access is generally from the highway but shared access is encouraged to preserve highway safety and function. The area is intended to incorporate various transportation modes, including all-season non-motorized connections (i.e. sidewalks, pathways, and trails) to increase the ease, safety, and convenience of walking and bicycling from surrounding neighborhoods. Future development or redevelopment will include improvements to the pedestrian realm, bicycle network, road crossings, and landscaping. Redevelopment will include the addition of trees, landscaped buffers, and bio-retention areas. These uses were previously accommodated in the B-2 and RM-1 districts.

The *Business Park / Light Industrial* future land use category corresponds with the *Business Park / Light Industrial (I-1, shown as light purple)* zoning district. Light industrial uses are fully enclosed with no outdoor operations or storage of materials or vehicles and with less intense operations that are compatible with commercial uses. These areas may include repair, distribution, laboratory, cleaning, and mini-warehousing operations. These uses are encouraged in a business park or campus-like setting with an abundance of landscape buffers and integrated natural stormwater management techniques. The planting and preservation of trees in this area is encouraged along with alternative energy infrastructure. Winter-city design principles will be implemented with all new development to enhance the pedestrian environment and ensure climate compatibility. Energy-efficient design and climate-sensitive and environmentally-friendly landscaping techniques will be rewarded through increased density allowances, stormwater credits, or other incentives.

The *General Industrial* future land use category corresponds with the *General / Heavy Industrial (I-2, shown as dark purple)* zoning district. This area includes industrial service, manufacturing, bulk commodities, and marine uses which engage in intense scale or volume of activity and may store materials or vehicles outdoors. Few customers, especially the general public, come to the site. These areas are characterized by the presence of heavy machinery, building materials, and raw materials for processing and storage, and the utilization of chemicals and intense processes. Appropriate landscape buffers are very important in transition areas around the perimeter of these uses. The planting of trees is encouraged to soften the impact of buildings of large scale or bulk and outdoor storage areas. This development needs access to minor arterials and collector roads, and roads will be designed to reflect heavier loads and expanded turning radii. Standards for

appropriate screening, buffering, and reducing fugitive dust materials will be incorporated. Energy-efficient design and climate-sensitive and environmentally-friendly landscaping techniques will be rewarded through increased density allowances, stormwater credits, or other incentives. These uses were previously accommodated in the I-2 and reserve districts.

The *Low Impact Development* future land use category corresponds with the *Low-Impact Economic Development (LID, shown as dark green with red grid)* zoning district. This district provides for future economic development opportunity in a form that meets the principles of Low-Impact Development in order to preserve the integrity of the natural resources of the area. These site layout standards include cluster development, minimal soil compaction and disturbance, protected natural water flows, riparian buffer areas, protection for sensitive environmental features, and minimal impervious surfaces. Structural standards include bioretention, stormwater recapture and use, infiltration practices, native re-vegetation, and pervious pavement with infiltration. Passive outdoor recreation opportunities are preferred. These uses were previously accommodated in the reserve district.

The *School Institutional* future land use category corresponds with the School Campus (SC, shown as grey) future zoning district. This district contains a mix of uses supporting the L'Anse area schools. This may include office, recreation, business incubator, vocational, and affordable housing opportunities. The *Utility* future land use category becomes a special land use or a permitted use in the appropriate zoning district. This use provides for the public or private generation of power or other public services.

Implementation Plan

This Master Plan Update includes many goals, objectives, ideas, projects and initiatives that can be implemented over time. The following table identifies projects and initiatives that will implement the Master Plan

Project/Initiative	Cost	Responsibility	Funding	Timeframe
Lambert Rd. Industrial Park Expansion		Village Council	EDA/Village	2017
Phase I Marina enhancement project		DDA/Village Council	DNR Waterways/DDA	2017
Phase II Water system Improvements	$1.2 million	Village Council	USDA Rural Development/Village	2017
Waterfront Park Splash Pad expansion		DDA/Village Council	DNR/Passport	2017
Sidewalk Replacement and Pedestrian Improvements	unknown	Village Council	Village	On-going
Energy Efficiency and Alternative Energy Projects	unknown	Village Council	Village/Grants	On-going
Downtown Placemaking	unknown	DDA	DDA/Grants	On-going
L'Anse Avenue Enhancement Conceptual Design	unknown	DDA/Village Council	DDA/Village	2018
L'Anse Avenue Enhancement Project construction	unknown	DDA/Village Council	MDOT/DDA/Village	2019
Head of the Bay Trail Development –L'Anse Segment	unknown	KBIC/Village Council/DDA	KBIC/Village/Grants	2019
Village Wayfinding System planning/conceptual design	unknown	DDA/Village Council	DDA/Village	2019
Village Wayfinding System	unknown	DDA/Village Council	DDA/Village/Grants	2020