CITY OF COLLINSVILLE
SUSTAINABILITY PLAN 2020

A long-range plan for enhancing the quality of life for present and future generations of Collinsville residents through sustainable practices.
CITY OF COLLINSVILLE
Municipal Sustainability Plan

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Executive Summary

What is sustainability? Sustainability is the ability to meet our needs without compromising the ability of future generations to meet theirs. The intent of the City of Collinsville Sustainability Plan is to improve the quality of life for present and future residents by considering the long-term significance of our everyday decisions.

The purpose of this plan is to identify Focus Areas and Goals that the City can use as a framework for making educated decisions based on resource conservation and life cycle costs. A true plan for sustainability cannot be short-term; it should be a leap forward towards a long-term and multigenerational plan of responsible action.

Focus Areas

The City of Collinsville 2020 Sustainability Plan is organized into five focus areas and sets goals within each area. These focus areas and goals will guide our future efforts, yet allow for flexibility. The timeline for implementation of Collinsville’s initiatives and proposed projects will vary. Ideas should be prioritized based on ease of implementation, availability of existing resources, funding commitments, and impact or urgency. It is our intention to undertake analyses of lifecycle costs so as to demonstrate the benefit of implementing projects and programs that, at the outset, may appear to be more costly, but over time, in fact, are significantly more cost-effective due to reduced operations, maintenance and replacement schedules, among other factors.

There are many ways in which the achievement of sustainable goals can have a positive impact on local and regional economies. These goals will not only conserve resources and reduce Collinsville’s greenhouse gas emissions, but also enhance economic vitality and lead to a more sustainable city. The City of Collinsville Sustainability Plan is intended to be a dynamic document; experience, testing, emerging and evolving technologies will be incorporated as we achieve goals and set new initiatives. All of the following five focus areas have a significant long-term impact on the sustainability of our community. The goals within each focus are intended to guide our actions.
Transportation

1. **Streets:** Create a network of multimodal Complete/Green Streets that add value to the surrounding properties.
   
   A. Identify, prioritize, and remedy Complete Street gaps and lack of connectivity with the road network by adding a bicycle lane (route) or sidewalks.
   
   B. Customize a long-term plan for creating a network of Green Streets.

2. **Mobility Options:** Promote alternatives to single-occupancy car travel.

   A. Increase participation in public transportation, carpooling, ridesharing, walking, biking, etc. (alternative transportation options).

      i. Increase the number of employers who offer incentive benefits for employees who participate in alternative transportation options.

      ii. Recognize employers who increase the numbers of employees who use alternative transportation options (Green Leaf Awards, etc.).

      iii. Continue to work with Madison County Transit to improve transit within the City and County.

      iv. Evaluate vehicle parking and bike racks at Transit Stations.

      v. Evaluate transit stops throughout the City.

      vi. Encourage Park & Ride areas within the City.

   B. Promote walking and biking.

      i. Create accessible walking and bike paths to parks, schools, libraries, grocery stores and shopping centers that are safe and well-lighted (using energy efficient lighting).

      ii. Be recognized as an accessible Walk Friendly and Bike Friendly Community.

      iii. Increase bike racks and transit stations at parks, stores, shopping centers, and throughout the City.

      iv. Evaluate parking needs.

3. **Efficient City Fleets:** Implement a City fleet investment, operations, and maintenance plan.

   A. Continue to add more hybrid/electric cars and charge stations to the City fleet as needed.

   B. Install solar panels to provide solar energy for recharging electric cars.

   C. Phase in no-idling practices for non-emergency vehicles.

   D. Encourage fleet drivers to refuel before 10 a.m. or after 7 p.m. and to plan trips to avoid unnecessary travel.

   E. Right-size/downsize the City fleet with the most fuel-efficient vehicles that are of an optimal size and capacity for their intended functions.

   F. Encourage trip bundling and vehicle sharing when possible.
Buildings, Grounds, and Lighting

1. **Efficient City-Owned and Operated Buildings:** Appoint an energy management team of City employees to benchmark energy usage and identify savings opportunities to implement cost-effective energy and sustainability improvements for City-owned and operated buildings.
   - A. Strongly encourage all City-owned and operated buildings to use energy efficient light bulbs and install daylight and/or occupancy sensors.
   - B. Conduct energy/lighting audits and implement energy savings programs, both internally and with the assistance of Ameren, Smart Energy Design Assistance Center, electrical contractors, other county, state, and federal programs, etc.
   - C. Calculate the average energy use of City-owned and operated buildings and implement a plan to reduce energy consumption by 10% based on the benchmark.
   - D. Promote energy efficient projects and practices that prioritize green building code improvements and retrofits.
   - E. Promote practices that use recyclable products in all City-owned and operated buildings/offices including paper containing at least 30% post-consumer recycled content.
   - F. Implement a “Shut Off” education campaign to encourage City employees to shut down computers, space heaters, lights, etc. when they are not in use.
   - G. Promote practices of replacing appliances with Energy Star Certified appliances and Environmental Protection Agency (EPA) Water Sense Certified or equivalent products.
   - H. Promote use of solar/green/white roofs.
   - I. Implement a green cleaning policy in all City-owned and operated buildings and offices by using certified sustainable products.
   - J. Choose electric, propane, or solar-powered tools and equipment, as is feasible, for any maintenance or groundskeeping.
   - K. Promote landscaping with native plants that are aesthetically pleasing, require no irrigation, fertilization and minimal, if any, mowing and are resistant to seasonal stresses.

2. **Efficient Existing Private Buildings:** Provide recognition and promote incentive-based programs for energy and sustainability improvements in existing private structures.
   - A. Recognize businesses and residents who made many sustainable achievements
   - B. Encourage businesses and residents to participate in incentive-based programs like Ameren’s ActOnEnergy.
   - C. Support programs that strongly encourage existing buildings to achieve or strive for Leedership in Energy and Environmental Design (LEED) or an Energy Star Qualified rating.
   - D. Educate community businesses and residents about the cost savings advantages associated with energy efficiency and sustainable improvements to their homes and businesses.
E. Inform businesses and residents about county, state, and federal programs, utilities, and other opportunities to implement cost-effective energy sustainability improvements.

F. Consider zoning restrictions that allow for greater height restriction on wind turbines.

G. Promote incentives for businesses and residents who use solar and green living roofs.

H. Promote the weatherization programs that are available through Madison County to low-income residents and senior citizens, and other programs available to the general public.

I. Encourage energy savings initiatives, daylight and occupancy sensors, “Computer Shut Off,” green cleaning practices, and natural landscaping to businesses and residents through education.

J. Encourage businesses and residents through education to use only electric, propane, or solar-powered tools.

K. Promote freestanding solar panels as an accessory use on residential properties.

3. New Green Buildings: Construct new buildings using a green building framework such as Leadership in Energy and Environmental Design (LEED) certification.

A. Create a City policy that new City-owned and privately owned buildings are built using a green building strategies.

B. Support programs that strongly encourage or provide incentives for sustainable construction practices such as advanced framing, insulated concrete forms, enlightened building envelope air and vapor control, energy efficient windows and doors and blower-door testing for air sealing.

C. Consider free or reduced-rate building permits and tap-ins for green construction.

D. Encourage contractors and do-it-yourselfers to minimize site disturbance during construction especially with regard to mature trees.

E. Encourage contractors and do-it-yourselfers to select light-emitting diode (LED) lighting and occupancy switching when practical.

F. Encourage contractors and do-it-yourselfers to select tankless water heaters and low-flow toilets and faucets.

G. Encourage contractors and do-it-yourselfers to use paints, caulks, chemicals and adhesives with no or low such as advanced framing, insulated concrete forms, enlightened building envelope air and vapor control, energy efficient windows and doors and blower-door testing for air sealing.

H. Encourage contractors and do-it-yourselfers to select methods and materials with minimal
embodied energy such as steel cladding instead of asphalt shingles or vinyl siding; or cellulose insulation instead of fiberglass and to select materials manufactured within 500 miles of building site.

I. Encourage for run-off control ecologically friendly, native landscaping and rain gardens.

4. **Efficient Outdoor Lighting and Signals:** Improve the efficiency and quality of street lighting, traffic signals, and outdoor public lighting.
   A. Replace all outdoor lighting owned by the City with energy efficient lighting as older lights expire or fiscal responsibility demands immediate replacement due to electricity and maintenance cost savings.
   B. Ask Ameren about its timeline to replace inefficient sodium halide and metal halide bulbs with LED. Request that all future lighting use LED for streetlights and traffic signals.

5. **Building Reuse:** Create economic and regulatory incentives for redeveloping and repurposing existing buildings before building new.
   A. Review historic preservation ordinances/regulations (Historic Preservation Committee) to encourage adaptive reuse.
   B. Adopt and implement a model for commercial revitalization using a green building strategies.
   C. Adopt development and design standards that facilitate infill and development.
   D. Continue to encourage new businesses to come to the City and use existing buildings for historic preservation and adaptive reuse.
   E. Seek grants from county, state, and federal funds to replace/restore old infrastructure in the City.
   F. Promote the use of solar roofs, green roofs, white roofs and light colored steel roofs.
   G. Encourage weatherization projects.
   H. Encourage ecologically friendly, natural landscaping.
   I. Encourage creative ways to use vacant property to foster a more holistic and sustainable neighborhood and community.
   J. Evaluate properties forfeited to the City for beautification, prosperity, public safety, and sustainability of the neighborhood and community.
   K. For forfeited properties, consider manual deconstruction and salvaging rather than bulldozing and landfilling; consider advertising available properties to parties willing to salvage them via the City’s website, local newspapers, and resale related websites.

6. **Renewables:** Expand the installation of renewable energy generation in the City.
   A. Adopt solar energy standards and wind energy ordinances that allow and encourage appropriate renewable energy installations for businesses, City-owned and operated buildings, organizations, and residents.
   B. Seek and promote local, county, state, and federal financial incentives for property owners to install renewable energy systems (solar, wind, geo-thermal).
   C. Develop plans to purchase Solar Panels/Wind Turbines to generate electricity for the City-owned and operated buildings.
   D. Promote the use of thermal storage systems for City-owned and commercial buildings.
   E. Provide incentives for businesses who use solar panels to generate electricity (individually
or in collaborative networking with other nearby businesses) or other sources of renewable energy.

F. Continue to select a bid from a company that uses 100% renewable energy for the electricity that is provided to City residents through electric aggregation.

G. Develop plans for installing solar panels/wind turbines to generate electricity throughout the City.
1. **Stormwater & Sewage Management**
   A. Reduce flooding and mitigate flood damage.
   B. Improve water quality.
   C. Promote best practices for land development.
   D. Develop organizational and regulatory framework. (Work with regional wastewater treatment plant regarding the current storm water ordinance.)
   E. Develop policies for sewage reduction by using “gray water” i.e., waste water from sinks, showers and washers (as opposed to “black water” containing human waste) for toilet flushing and irrigation.
   F. Conduct public education and outreach such as publicized lectures by naturalists and representatives from Missouri Botanical Gardens or from local colleges and universities, and Willoughby Farms; also consider organized tours of local sustainability projects such as rain gardens, native landscaping and energy efficient buildings.
   G. Promote permeable pavers in lieu of non-pervious materials.

2. **Water Quality & Conservation:** Continually assess City drinking water provider and wastewater facilities.
   A. Assess the energy and chemical use at drinking water and wastewater facilities.
   B. Encourage installation of green infrastructure.
   C. Educate businesses, organizations, City employees, and residents of the importance of water quality, water conservation, and relative incentives.
   D. Promote practices that conserve water at City-owned and operated buildings.

3. **Air Quality:** Reduce the generation of local air contaminants and take steps to improve the air quality of the City to attract people to the community.
   A. Complete a Greenhouse Gas Inventory to establish a baseline for measurements of gases (CO2, methane, nitrous oxide, etc.).
   B. Conduct a Greenhouse Gas Inventory every three years to measure greenhouse gas reduction improvements made in the City.
   C. Develop long-term objectives to address air quality issues that focus on improving the health and quality of life of its residents.
   D. Educate our residents and realtors about air quality including:
      i. Health risks
      ii. Air quality index and outdoor activity guide
      iii. Air quality forecasting using airnow.gov tools
      iv. Air quality improvement
      v. The causes of climate change
   E. Recognize efforts of City-owned and operated facilities, private businesses, organizations, and schools that encourage practices that improve air quality.
   F. Plant trees near heavy traffic areas, industrial areas, and throughout the City to improve air quality and public health.
G. Consider alternatives to spraying for mosquitoes and its negative effect on pollinators, such as bees and butterflies.

   A. Recycling Program: Benchmark is X% of residential curbside pickup weight in the City is recycled. Increase to national average of X% in the first year.
      i. Waste Management has provided large capacity recycling containers for all residents and will now provide reports on the percentage of residents who are participating.
      ii. Incentives from Republic Services to encourage participation.
   B. Waste, Recycling, and Reuse
      i. Inform the public about the location of public compost sites, what is accepted for composting (yard waste, fruits and vegetables, etc.), and why it is important to compost.
      ii. Provide information about all types of recycling and locations/dates for each type of recycling: paper glass, plastic, yard waste, paints and thinners, medicines, appliances, equipment, and more.
      iii. Strongly encourage City-owned and operated facilities to utilize recycling containers.
      iv. Encourage other public properties (parks, libraries, etc.), and private businesses to utilize recycling containers.
      v. Identify and provide opportunities for reuse of products by encouraging businesses/organizations to come to our community who specialize in reuse.
Land Use & Planning

1. **Comprehensive Plan & Implementation:** Adopt a Comprehensive Plan and tie it to regulatory ordinances.
   
   A. Research, write, and adopt a Comprehensive Plan for land use strategy in the City.
   
   B. Implement the Comprehensive Plan, by modifying zoning ordinances to explicitly reference the Comprehensive Plan as the controlling document for decision making.
   
   C. The Comprehensive Plan must include environmental protection standards to govern land use planning.

2. **Green Space Conservation and Undeveloped Land:** Conserve and optimize usage of remaining undeveloped open and green spaces, including: wetlands, forest, potential park lands, potential or existing trails, and farmland.
   
   A. Identify and inventory elements of the City’s green infrastructure network and develop mechanisms to acquire and build components of our green infrastructure network.
   
   B. Govern green spaces through Comprehensive Plan and/or ordinances.
   
   C. Govern wetlands conservation, habitat linkage, and natural systems through Comprehensive Plan and/or ordinances.
   
   D. Support and protect existing community parks and open spaces.
   
   E. Through zoning incentives, develop land use measures that limit the impact of growth on prime farmland by encouraging development within planned municipal growth areas.

3. **Smart Growth:** Pursue new developments and redevelopments throughout the community that create walkable, connected, environmentally sustainable, attractive housing, shopping and business spaces, which optimize land usage and produce financially sustainable infrastructure usage.
   
   A. New Developments: Walkable, Accessible, Connected, Dense Neighborhood & Commercial Planning
      
      i. Develop land use practices that reduce vehicle miles travelled by encouraging residential and commercial developments in areas within municipal boundaries.
      
      ii. Incorporate into land use and transportation plans the movement of people through systems, with the overall goal of providing residents various opportunities to travel by walking, biking or use of public transportation.
      
      iii. Promote a mix of land uses that promote long-term economic sustainability in the City.
      
      iv. Develop efficient and healthy land patterns that generate community wealth.
      
      v. Promote financial and environmental sustainability by enabling and encouraging walkable housing and commercial land use.
      
      vi. Promote the reuse of existing building and infrastructure.
   
   B. Existing Neighborhoods: Infill Housing & Restoration
      
      i. Heavily emphasize revitalizing existing neighborhoods, through restoration, urban
infill, and any strategies that make our neighborhoods a vibrant place to live, thus making the best use of existing infrastructure and resources.

ii. Promote the replacement of aged-out energy wasting housing with new green construction.

iii. Promote the development of neighborhoods that are characterized by well connected, walkable streets and allow a mix of neighborhood-serving land use.

iv. Develop and amend existing neighborhood streets to provide pedestrian and bike infrastructure, creating easy access to local businesses.

v. Support active lifestyles by enhancing the City’s green infrastructure, potentially increasing property values. Inventory all neighborhoods in the City, highlighting best revitalization opportunities, and promoting unique neighborhood identities.

vi. Develop urban infill guidelines that provide multiple best-use options for neighborhood empty lots / infill opportunities, promoting sustainable best practices.

vii. Seek grants and county, state, and federal funds to replace/restore older neighborhoods.

C. Green Beautification and Urban Forests

i. Conserve open space in areas of growth.

ii. Encourage creation of a tree inventory and maintenance plan via both helpful recommendations for private residents and potential ordinances for City property.

iii. Connect community parks and open space through green infrastructure corridors and greenways.

iv. Plant trees, with a preference to native varieties that support wildlife, such as beneficial insects, and sequester CO2; consider subsidizing private involvement with grants and free or low-cost assistance from City personnel and equipment.

D. Brownfield and Blight Stewardship

i. Inventory potential and confirmed Brownfield sites; prioritize them for planning and potential redevelopment.

ii. Identify and pursue state and federal cleanup funding sources.

iii. Research brownfield reuse best strategies from other industry-heavy municipalities.

iv. Research and assess creation of Buffer Zones between industrial areas and blighted residential, potentially creating green spaces from significantly blighted residential.
Community Development, Engagement, and Education

1. **Local Food:** Increase local food within and near the City.
   - A. Continue to support & expand local community gardens/local farmers’ markets in the City.
   - B. Encourage businesses, schools, organizations, churches, civic groups, and residents to join the community garden effort in the City.
   - C. Encourage businesses, schools, organization, churches, civic groups and residents to select foods that are produced and distributed with minimal impact on the environment, e.g., poultry, fish, and locally-grown fruits and vegetables instead of beef, lamb and produce from California.

2. **Environmental Justice and Diversity:** Promote diversity in all facets of life in the City, to ensure equity for at-risk groups who may be disproportionately affected by environmental degradation, such as food deserts and floodplain development.

3. **Business Synergies**
   - A. Establish a communication network of businesses, schools, government, and organizations to share information to achieve better energy, economic and environmental outcomes.
   - B. Encourage the above groups to engage in the focus groups of the Economic Development Strategic Action Plan.

4. **Regional Sustainability:** Participate in and promote regional sustainability education and projects.
   - A. Continue to communicate with the other sustainability committees to share information and explore new approaches to sustainability.
   - B. Collaborate with Madison County sustainability personnel in their efforts to increase sustainability throughout Madison County.
   - C. Support ongoing regional sustainability efforts through sharing and collaboration with East-West Gateway Council of Governments, Heartlands Conservancy, Sierra Club, One St. Louis, and similar sustainability programs.

5. **Smart Growth and Environmental Awareness**
   - A. Increase public awareness of environmentally beneficial projects that citizens can do in their homes and neighborhoods.
     - i. Promote the benefits of planting trees on private property and along streets. Provide guidance as to the types of trees that are best suited for varying locations.
     - ii. Develop rain gardens in public places (e.g. Woodland Park) and include information on...
placards that describe the benefits of rain gardens.

iii. Promote home recycling and energy efficiency.

6. **Green Business Development:** Increase expansion of the City’s green business sector.

   A. Seek and promote new green businesses and green jobs.

   B. Identify and promote ways to attract businesses to the City that specialize in sustainable technologies and provide green products and services.

   C. Promote green businesses that are certified under a local, regional, or national program.

   D. Promote workforce training programs in partnership with Collinsville Unit School District 10 that focus on renewable energy.

   E. Encourage community businesses to join the “Green Business Alliance” in Madison County, the Green Dinning Alliance, or participate in the St. Louis Botanical Garden’s Green Business Challenge.

   F. Encourage businesses through education and incentives to purchase and stock products that are environmentally safe, green, and labeled low vapors.

   G. Encourage businesses through education and incentives to use electric, propane, or solar powered tools for any maintenance or grounds keeping, avoiding gasoline-powered lawn and gardening tools.

   H. Encourage businesses through education and incentives to use slow growing native grass seed and use natural landscaping with native flora.