City of Granite City

Sustainability Action Plan

2017

Moving forward socially, economically, and ecologically;
creating a viable present and a vibrant future.

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1. **Transportation**

a. <u>Streets</u>

Create a network of multimodal Complete/Green Streets that add value to the surrounding properties.

    i. Identify, prioritize, and remedy Complete Street gaps and lack of connectivity with the road network by adding a bicycle lane (route) or sidewalks.

    ii. Customize a long-term plan for creating a network of Green Streets.

b. <u>Mobility Options</u>

Promote alternatives to single-occupancy car travel.

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

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

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

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

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

        5. Evaluate transit stops throughout the City.

    ii. Promote walking and biking.

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

        2. Be recognized as a Walk Friendly and Bike Friendly Community.

3. Increase bike racks and transit stations at parks, stores, shopping centers, and throughout the City.
4. Evaluate parking needs.

c. <u>Efficient City Fleets</u>
Implement a City fleet investment, operations, and maintenance plan.
   i.   Continue to add more hybrid/electric cars and charge stations to the City fleet as needed.
   ii. Install solar panels to provide solar energy for recharging electric cars.
   iii. Phase in no-idling practices for non-emergency vehicles.
   iv. Encourage fleet drivers to refuel before 10 a.m. or after 7 p.m. and to plan trips to avoid unnecessary travel.
   v.   Right-size/downsize the City fleet with the most fuel-efficient vehicles that are of an optimal size and capacity for their intended functions.
   vi. Encourage trip bundling and vehicle sharing when possible.
   vii. Keep all City fleet vehicles well-maintained.

2. Buildings, Grounds, and Lighting

a. <u>Efficient City-Owned and Operated Buildings</u>
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.
   i. Strongly encourage all City-owned and operated buildings use energy efficient light bulbs and install daylight and/or occupancy sensors.
   ii. 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.

iii. 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.

iv. Promote energy efficient projects and practices that prioritize green building code improvements and retrofits.

v. Promote practices that use recyclable products in all City-owned and operated buildings/offices including paper containing at least 30% post-consumer recycled content.

vi. Implement a "Shut Off" education campaign to encourage City employees to shut down computers, space heaters, lights, etc. when they are not in use.

vii. Promote practices of replacing appliances with Energy Star Certified appliances and EPA Water Sense Certified or equivalent products.

viii. Promote use of solar/green/white roofs.

ix. Implement a green cleaning policy in all City-owned and operated buildings and offices by using certified sustainable products.

x. Choose electric, propane, or solar-powered tools and equipment, as is feasible, for any maintenance or groundskeeping.

xi. Try natural landscaping by using native and drought-tolerant flora to create surroundings that are aesthetically pleasing, easy and less costly to maintain, and resistant to seasonal stresses.

xii. Create an Incentives Program for employees such as Granite City Spotlight of Stars or Green Leaf Awards.

b. <u>Efficient Existing Private Buildings</u>
Provide recognition and promote incentive-based programs for energy and sustainability improvements in existing private structures.

i. Recognize businesses and residents who made many sustainable achievements (Granite City Spotlight of Stars or Green Leaf Awards).

ii. Encourage businesses and residents to participate in incentive-based programs like Ameren's ActOnEnergy.

iii. Support programs that strongly encourage existing buildings to achieve or strive for LEED or Green Globes certifications or an Energy Star Qualified rating.

iv. Educate community businesses and residents about the cost savings advantages associated with energy efficiency and sustainable improvements to their homes and businesses.

v. Inform businesses and residents about county, state, and federal programs, utilities, and other opportunities to implement cost-effective energy sustainability improvements.

vi. Promote incentives for businesses and residents who use solar/green/or white roofs.

vii. 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.

viii. Encourage energy and lighting audits and energy management programs.

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

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

c. New Green Buildings

Construct new buildings using a green building framework such as LEED or Green Globes.

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

ii. Support programs that strongly encourage or provide incentives for new green construction.

   iii.   Encourage contractors to use paints, caulks, chemicals and adhesives with no or low VOCs and to recycle construction debris.

   iv.   Encourage ecologically friendly, natural landscaping.

d. <u>Efficient Outdoor Lighting and Signals</u>

Improve the efficiency and quality of street lighting, traffic signals, and outdoor public lighting.

   i.   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.

   ii.   Ask Ameren about about their timeline to replace inefficient sodium halide and metal halide bulbs with LED. Request that all future lighting use LED for streetlights and traffic signals.

e. <u>Building Reuse</u>

Create economic and regulatory incentives for redeveloping and repurposing existing buildings before building new.

   i.   Review historic preservation ordinances/regulations (Historical Architecture Review Commission) to encourage adaptive reuse.

   ii.   Adopt and implement a model for commercial revitalization using a green building framework.

   iii.   Adopt development and design standards that facilitate infill and development.

   iv.   Continue to encourage new businesses to come to the City and use existing buildings for historic preservation and adaptive reuse.

   v.   Seek grants from county, state, and federal funds to replace/restore old infrastructure in Granite City.

   vi.   Promote the use of solar roofs, green roofs, or white roofs.

   vii.   Strongly encourage contractors to use paints, caulks, chemicals, and adhesives with no or low VOCs and recycle construction debris.

viii.   Encourage weatherization projects.

ix.   Encourage ecologically friendly, natural landscaping.

x.   Encourage creative ways to use vacant property to foster a more holistic and sustainable neighborhood and community.

xi.   Evaluate properties forfeited to the City for beautification, prosperity, public safety, and sustainability of the neighborhood and community.

f. Renewables

Expand the installation of renewable energy generation in Granite City.

i.   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.

ii.   Seek and promote local, county, state, and federal financial incentives for property owners to install renewable energy systems (solar, wind, geo-thermal).

iii.   Develop plans to purchase Solar Panels/Wind Turbines to generate electricity for the City-owned and operated buildings.

iv.   Promote the use of thermal storage systems for City-owned and commercial buildings.

v.   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.

vi.   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.

vii.   Develop plans for installing solar panels/wind turbines to generate electricity throughout Granite City.

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3. Environmental Management

a. <u>Stormwater Management</u>
   i. Reduce flooding and mitigate flood damage.
   ii. Improve water quality.
   iii. Promote best practices for land development.
   iv. Develop organizational and regulatory framework. (Work with regional wastewater treatment plant regarding the current stormwater ordinance.)
   v. Conduct public education and outreach.

b. <u>Water Quality & Conservation</u>
   Continually assess City drinking water provider and wastewater facilities.
   i. Assess the energy and chemical use at drinking water and wastewater facilities.
   ii. Encourage installation of green infrastructure.
   iii. Educate businesses, organizations, City employees, and residents of the importance of water quality, water conservation, and relative incentives.
   iv. Promote practices that conserve water at City-owned and operated buildings.

c. <u>Air Quality</u>
   Reduce the generation of local air contaminants and take steps to improve the air quality Granite City to attract people to the community.
   i. Complete a Greenhouse Gas Inventory to establish a baseline for measurements of gases (CO_2, methane, nitrous dioxide, etc.).
   ii. Conduct a Greenhouse Gas Inventory every three years to measure greenhouse gas reduction improvements made in Granite City.

iii. Develop long-term objectives to address Granite City's air quality issues that focus on improving the health and quality of life of its residents.

iv. Educate our community about air quality including:
1. Health risks
2. Air quality index and outdoor activity guide
3. Air quality forecasting using airnow.gov tools
4. Air quality improvement
5. Climate change

v. Recognize efforts of City-owned and operated facilities, private businesses, organizations, and schools that encourage practices that improve air quality.

vi. Plant trees near heavy traffic areas, industrial areas, and throughout the City to improve air quality and public health.

d. <u>Waste Reduction and Recycling</u>

Increase waste reduction, reuse and recycling.

i. Recycling Program: Benchmark is 18% of residential curbside pickup weight in Granite City is recycled. Increase to national average of 33% in the first year.
1. Waste Management has provided large capacity recycling containers for all residents and will now provide reports on the percentage of residents who are participating.
2. Incentives from Waste Management, through RecycleBank, are provided to residents to encourage participation.
3. Waste Management can provide public education for residents about recycling.
4. City recycling statistics to be available via the Granite City website (http://www.granitecity.illinois.gov).

ii. Waste, Recycling, and Reuse
1. 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.

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2. 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.
3. Strongly encourage City-owned and operated facilities to utilize recycling containers.
4. Encourage other public properties (parks, libraries, etc.), and private businesses to utilize recycling containers.
5. Identify and provide opportunities for reuse of products by encouraging businesses/organizations to come to our community who specialize in reuse.

4. Land Use & Planning

a. <u>Comprehensive Plan & Implementation</u>
   Adopt a Comprehensive Plan and tie it to regulatory ordinances.
   i. Research, write, and adopt a Comprehensive Plan for land use strategy in Granite City.
   ii. Implement the Comprehensive Plan, by modifying zoning ordinances to explicitly reference the Comprehensive Plan as the controlling document for decision making.
   iii. The Comprehensive Plan must include environmental protection standards to govern land use planning.

b. <u>Green Space Conservation and Undeveloped Land</u>
   Conserve and optimize usage of remaining undeveloped open and green spaces, including: wetlands, forest, potential park lands, potential or existing trails, and farmland.
   i. Identify and inventory elements of Granite City's green infrastructure network and develop mechanisms to acquire and build components of our green infrastructure network.

      ii.   Govern green spaces through Comprehensive Plan and/or ordinances.

    iii.   Govern wetlands conservation, habitat linkage, and natural systems through Comprehensive Plan and/or ordinances.

    iv.   Support and protect existing community parks and open spaces.

    v.   Through zoning incentives, develop land use measures that limit the impact of growth on prime farmland by encouraging development within planned municipal growth areas.

c. <u>Smart Growth</u>

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.

    i.   New Developments: Walkable, Connected, Dense Neighborhood & Commercial Planning

        1.   Develop land use practices that reduce vehicle miles travelled by encouraging residential and commercial developments in areas within municipal boundaries.

        2.   Incorporate 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 into land use and transportation plans.

        3.   Promote a mix of land uses that promote long-term economic sustainability in Granite City.

        4.   Develop efficient and healthy land patterns that generate community wealth.

        5.   Promote financial and environmental sustainability by enabling and encouraging walkable housing and commercial land use.

        6.   Promote the reuse of existing building and infrastructure.

ii. Existing Neighborhoods: Infill Housing & Restoration
1. 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.
2. Promote the development of neighborhoods that are characterized by well connected, walkable streets and allow a mix of neighborhood-serving land use.
3. Develop and amend existing neighborhood streets to provide pedestrian and bike infrastructure, creating easy access to local businesses.
4. Support active lifestyles by enhancing the City's green infrastructure, potentially increasing property values.
Inventory all neighborhoods in Granite City, highlighting best revitalization opportunities, and promoting unique neighborhood identities.
5. Develop urban infill guidelines that provide multiple best-use options for neighborhood empty lots / infill opportunities, promoting sustainable best practices.
6. Seek grants and county, state, and federal funds to replace/restore older neighborhoods.
iii. Green Beautification and Urban Forests
1. Conserve open space in areas of growth.
2. Encourage creation of a tree inventory and maintenance plan, creating helpful recommendations for private residents and potential ordinances for City property.
3. Connect community parks and open space through green infrastructure corridors and greenways.
4. Plant trees, with a preference to native varieties, to reduce emissions and improve health of residents.

d. <u>Brownfield and Blight Stewardship</u>
   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 areas. (Buffer zones can be single properties adjacent to businesses or much larger areas, such as blocks or part of former neighborhoods.)
   v. Promote non-traditional, creative property usage in blighted areas with artists, entrepreneurs, and others, which produce attractional and/or sustainable use of existing blighted structures and lots.

5. Community Development, Engagement, and Education

a. <u>Local Food</u>
   Increase local food within and near Granite City.
   i. Continue to support & expand local community gardens/local farmers' markets in Granite City.
   ii. Encourage businesses, schools, organizations, churches, civic groups, and residents to join the community garden effort in Granite City.
   iii. Continue to support the Melting Pot Market in downtown Granite City. Encourage local farmers to bring their produce to sell at the Melting Pot Market.
   iv. Seek and encourage grocery stores and farmers' markets to locate in downtown Granite City, West Granite, and East Granite to eradicate food deserts in these areas.

b. <u>Environmental Justice and Diversity</u>
   i.   Promote diversity in all facets of life in Granite City, to ensure equity for at-risk groups who may be disproportionately affected by environmental degradation.

c. <u>Business Synergies</u>
   i.   Establish a communication network of businesses, schools, government, and organizations to share information to achieve better energy, economic and environmental outcomes.
   ii. Encourage the above groups to engage in the focus groups of the Economic Development Strategic Action Plan.

d. <u>Communication</u>
   i.   Encourage City Council to explore current technologies to provide Granite City news and information sharing to all residents, businesses, and organizations (Facebook, Twitter, website, podcasting, YouTube, live streaming, etc.).
   ii. Educate all residents, businesses, and organizations in Granite City about all aspects of the Sustainability Plan.

e. <u>Regional Sustainability</u>
   Participate in and promote regional sustainability education and projects.
   i.   Continue to communicate with the other Madison County "Cool Cities" committees to share information and explore new approaches to sustainability.
   ii. Collaborate with Madison County sustainability personnel in their efforts to increase sustainability throughout Madison County.
   iii. 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.

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f. <u>Smart Growth and Environmental Awareness</u>
   i. Increase public awareness of environmentally beneficial projects that citizens can do in their homes and neighborhoods.
      1. Promote the benefits of planting trees on private property and along streets. Educate the the types of trees that are best suited for varying locations.
      2. Develop rain gardens in public places (e.g. Wilson Park) and include information placards that describe the benefits of rain gardens.
      3. Promote home recycling and energy efficiency.

g. <u>Green Business Development</u>
   Increase expansion of Granite City's green business sector.
   i. Seek and promote new green businesses and green jobs.
   ii. Promote incentives to businesses who sell recycled products.
   iii. Identify and promote ways to attract businesses to Granite City that specialize in sustainable technologies and provide green products and services.
   iv. Promote green businesses that are certified under a local, regional, or national program.
   v. Seek businesses that manufacture renewable sources of energy (solar panel companies or factories that build transformers for Wind Turbines) and will hire locally. Encourage partnership with Granite City Steel to provide steel.
   vi. Promote workforce training programs in partnership with Granite City Community Unit School District 9 and Southwestern Illinois College that focus on renewable energy.
   vii. Encourage community businesses to join the "Green Business Alliance" in Madison County.
   viii. Encourage businesses through education and incentives to purchase and stock products that are environmentally safe, green, and labelled low vapors.

ix.   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.

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

xi.   Develop an incentive program for businesses, organizations, schools, and residents, such as "Granite City Spotlight of Stars" or "Green Leaf Business Awards," that provide special awards and/or recognition for promoting green initiatives and sustainable efforts within their business, organization, or residence.

Relevant Website Links & Glossary

A helpful collection of relevant website links, as well as practical glossary of terms, can be found by searching for "sustainability" on the City of Granite City website (http://www.granitecity.illinois.gov).

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