REPORT TO COUNCIL

2022

CLIMATE & SUSTAINABILITY PROGRESS UPDATE

CITY OF BLOOMINGTON
ECONOMIC AND SUSTAINABLE DEVELOPMENT

Bloomington Climate & Sustainability Action Plans

The 2021 Bloomington Climate Action Plan (CAP) established long-term climate resilience vision and mitigation goals for Bloomington through 2050. Implementation of the Climate Action Plan strategic and actions is intended as a 10 year communitywide effort implemented in three phases throughout the decade.

The 2018 Sustainability Action Plan (SAP) represented the first formal sustainability planning effort for the City of Bloomington and strengthened existing sustainability efforts by identifying and communicating strategic goals with an emphasis on climate change goals and mitigation strategies.

The following 2022 Progress Report to Council includes a brief description of progress towards actions designated as "completed," "underway," "ongoing," "not started," or "inactive."

Find both the Climate & Sustainability Action Plans and past year's climate and sustainability reports to Council on the City of Bloomington's website at: bloomington.in.gov/sustainability.

Bloomington's Climate Action Plan goal is to reduce community greenhouse gas emissions 25% below 2018 emissions levels by 2030 and achieve carbon neutrality by 2050.

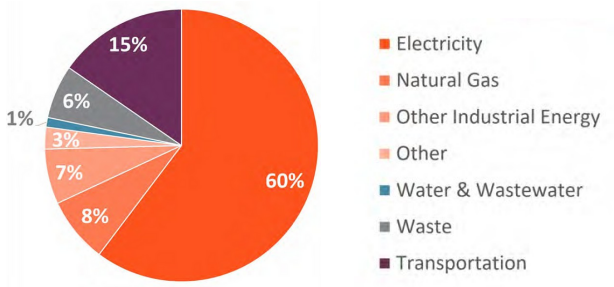
1.3

In 2018, 1.3 million metric tons of carbon dioxide equivalent (MT CO2e) were emitted in Bloomington.

16%

Between 2008 and 2018, greenhouse gas emissions fell 16% due in part to reduced emissions associated with energy use.

Bloomington GHG Emissions Sources (2018)



Bloomington greenhouse gas emissions are projected to decrease an additional 9% by 2030 for a 43% total reduction by 2050 under a "business-as-usual" scenario. Successful implementation of sector based strategies and climate action goals are projected to reduce emissions by 321,856 metric tons annually and increase resiliency to climate impacts.

Climate Mitigation- community emissions sources
(see pie chart above for percentage contributions)

- Buildings & Energy- electricity and natural gas consumption
- Transportation - on-road vehicle traffic and off-road equipment
- Waste Management- landfill gas generation
- Water & Wastewater- wastewater collection and treatment

Climate Adaptation- improve resilience outcomes

- Health & Safety- reduce climate impacts, including heat and flooding
- Water & Wastewater- improve flood mitigation and reduced stormwater infiltration
- Local Food & Agriculture- increase local food system & production capacity
- Greenspace & Ecosystem Health- urban tree canopy coverage & greenspace

Bloomington Climate & Sustainability Action Plans
2022 Progress Tracker

Climate Change & Adaptation

Completed (7)	Underway (0)	Ongoing (2)	Not Started (0)	Inactive (0)

Buildings & Energy Use

Completed (8)	Underway (9)	Ongoing (0)	Not Started (19)	Inactive (4)

Transportation and Land Use

Completed (11)	Underway (7)	Ongoing (11)	Not Started (14)	Inactive (2)

Waste Management

Completed (1)	Underway (4)	Ongoing (1)	Not Started (13)	Inactive (1)

Water & Wastewater

Completed (20)	Underway (1)	Ongoing (3)	Not Started (10)	Inactive (0)

Local Food & Agriculture

Completed (7)	Underway (2)	Ongoing (0)	Not Started (19)	Inactive (3)

Health & Safety

Completed (0)	Underway (2)	Ongoing (1)	Not Started (8)	Inactive (0)

Greenspace

Completed (6)	Underway (0)	Ongoing (5)	Not Started (8)	Inactive (2)

Climate Economy

Completed (2)	Underway (2)	Ongoing (0)	Not Started (8)	Inactive (0)

Climate Change & Adaptation

Completed (7)	Underway (0)	Ongoing (2)	Not Started (0)	Inactive (0)

SAP GOAL 1.1: Reduce community GHG emissions 11 percent by 2023, relative to a baseline of 1.3 million metric tons of GHG emissions in 2016.

Completed:
- ✓ 1.1.a. Establish a consistent methodology for measuring and reporting community GHG emissions.
- ✓ 1.1.b. Evaluate the viability of creating a community renewable energy goal.
- ✓ 1.1.c. Implement Solarize Bloomington with the Solar Indiana Renewable Energy Network (SIREN) to aid residential low cost solar installations.
- ✓ 1.1.d. Achieve designation as a SolSmart community by taking steps to streamline development requirements and encourage local solar markets.
- ✓ 1.1.e. Educate the public about the Monroe County Solar for All campaign and geothermal installations.
- ✓ 1.1.f. Investigate the feasibility of becoming a Green Power Community to encourage businesses, institutions, and individuals to collectively use more clean power.

Ongoing:
- ○ 1.1.g. Facilitate habitat restoration and tree planting with proper siting on public and private properties to sequester carbon dioxide and reduce building energy needs.
- ○ 1.1.h. Engage local businesses to reduce GHG emissions through outreach, education, and advisory services.

SAP GOAL 1.2: Create a community climate adaptation plan by 2022.

Completed:
- ✓ 1.2.a. Conduct a climate vulnerability assessment.

Energy & Built Environment

Completed (8)	Underway (9)	Ongoing (0)	Not Started (19)	Inactive (4)

SAP GOAL 2.1: Reduce building energy use in the Bloomington community 20 percent by 2023, relative to a baseline usage of 9.4 million MMBTUs in 2016.

Completed:
- ✓ 2.1.b. Establish a consistent methodology to monitor and report community-wide energy use.
- ✓ 2.1.d. Collaborate with local utility companies to improve energy efficiency programs and sub-metering.
- ✓ 2.1.f. Work with private and non-profit lenders to establish low-interest loans for small-scale energy efficiency improvements and renewable energy projects.

Underway:
- ❖ 2.1.c. Collaborate with the business community on a voluntary program to disclose energy usage and costs, to help drive future energy savings.
- ❖ 2.1.e. Collaborate with local landlords to establish a voluntary program for green leases that clarify landlord and tenant responsibilities for energy efficiency projects and associated energy savings.

Inactive:
- ◆ 2.1.a. Develop and implement an annual work plan for the Monroe County Energy Challenge (MCEC) to improve residential and commercial energy efficiency.

SAP GOAL 2.2: Increase the percentage of residential and commercial buildings using sustainable building certification programs and incentives by 2023, relative to a 2019 baseline.

Completed:

- ✓ 2.2.a. Update the Sustainable Development Incentive program and develop a mechanism to track utilization of the program and post data to BClear.
- ✓ 2.2.c. Evaluate the development of a SMART goal for increasing the use of sustainable building certification program, per the development of a 2019 baseline.
- ✓ 2.2.d. Develop a list of sustainable building projects to establish a baseline for 2019, and a mechanism for tracking this data moving forward.

Underway:

- ❖ 2.2.b. Develop an educational program on sustainable building certifications and incentive programs in collaboration with the business community.

Inactive:

- ◆ 2.2.e. Create annual sustainable building tour for commercial builders.
- ◆ 2.2.f. Complete at least one Living Building Challenge petal certification project.
- ◆ 2.2.g. Host an annual green home show to showcase sustainable building features and programs.

CAP Goal EB 1: Increase distributed renewable energy to 250,000 MWH of total generation annually by 2030.

Strategy EB 1-A: Increase solar on City facilities 20% by 2030.

Not Started:

- ▪ EB1-A-1: Conduct a detailed "Renewable Energy Master Plan" for all primary city facilities which have not yet already achieved renewable energy meeting 100% annual energy demand. Plan to incorporate strategies to address electricity storage, energy resilience, emergency operations, explore virtual net metering with Duke Energy, and provide an implementation plan to achieve on-site renewable energy goal and outline options to achieve 100% renewable energy for all city facilities (on-site and offsite options).
- ▪ EB1-A-2: Establish a policy which requires all new construction and significant renovation projects for City facilities to be constructed to meet "Solar Ready" requirements and to include a solar feasibility assessment and project option for inclusion of on-site solar, include "Return on Investment" assessment, and incorporate solar where return is favorable.

Strategy EB 1-B: Support and accelerate installation of on-site solar PV to 250,000 MWH of total generation citywide annually by 2030.

Underway:

- ❖ EB1-B-3: Continue to sponsor a community-wide "Solarize" program for residential group purchase of Solar PV. Explore use of city staff, resources, or financing mechanisms to support the required reach of annual solarize programs to achieve long-range goals.
- ❖ EB1-B-4: Partner on a county-wide solar strategy to expand solar, especially to low and moderate income households with a goal of 60 low income homes installed annually. Explore the establishment of financing mechanisms such as revolving loans, grants, or use of LIHEAP funding to support affordability and equitable renewable energy adoption.
- ❖ EB1-B-1: Identify the "Solar Top 50" commercial/industrial properties within the city and produce detailed solar feasibility assessments for each site. Assessments to include potential solar generation and economic performance and return on investment estimates, information on financing and ownership models, and next step resources. Provide solar assessment reports to properties, free of charge, and conduct an informational workshop to assist building owners and businesses in understanding the assessments and next step potential. "Solar Top 50" assessment effort could be repeated annually, particularly through 2025.
- ❖ EB1-B-2: Sponsor a community-wide "Solarize" program for commercial and industrial group purchase of Solar PV. Include an invitation to participate to all building sites included in the "Solar Top 50" feasibility effort. Explore use of city staff, resources, or financing mechanisms to support the required reach of annual solarize programs to achieve long range goals.

Strategy EB 1-C: Improve energy policy.

Completed:

- ✓ EB1-C-1: Streamline and offer expedited permitting for renewable energy installations.

CAP Goal EB 2: Increase energy efficiency citywide 16% for electricity and 12% for natural gas of 2018 values.

Strategy EB 2-A: Increase total City owned building electrical energy efficiency 16% for electricity and 12% for natural gas of 2018 values.

Not Started:

- EB2-A-1: Update the City's Green Building Program policy to include clear energy reduction requirements to be measured annually during the building's operation (such as "achieving and maintaining a minimum ENERGY STAR rating of 75, and built to meet or exceed IGCC code"). Consider increasing the minimum LEED design standard to Gold. Invite County, School District, and other public agencies located within the City to participate in City's Green Building Program standards.
- EB2-A-2: Establish a policy to require all primary City facilities to benchmark and disclose annual energy consumption. Invite County, School District, and other public agencies located within the City to participate in City's facilities benchmarking and disclosure effort.
- EB2-A-3: Conduct a Building Energy Audit on all primary City owned facilities without energy audits conducted within last 5 years. Fully implement recommendations of these and previous audits. Prioritization should be given to the City's largest energy consuming sites.
- EB2-A-4: Establish a City policy requiring the review of all large capital expenditures against the GHG emission reduction and climate adaptation goals of the CAP. Capital projects to be reviewed against their projected contributions in reduced GHG emissions, energy use, and vehicle-miles-traveled as well as the project's projected social cost of carbon savings and climate resilience. Explore development of project calculator tools to evaluate capital project proposals against City's CAP Goals.

Strategy EB 2-B: Support and accelerate energy efficiency citywide.

Not Started:

- EB2-B-1: Adopt, implement, and promote a Commercial Building Energy Benchmarking and Disclosure ordinance for all public buildings and all commercial buildings 30,000 square feet and larger.
- EB2-B-2: Work with utilities to incentivize and promote replacement of inefficient building heating and cooling equipment before end-of-life, and facilitate the bulk purchasing of efficient equipment. Goal: achieve 250 households replacing equipment annually.
- EB2-B-3: Establish an Energy Efficiency Upgrade cost sharing incentive program providing a 25% matching grant for qualified buildings and applicants. Coordinate grant with utility offered rebates. Goal: utilization by 60 businesses annually

Strategy EB 2-C: Support and accelerate energy efficiency citywide.

Not Started:

- EB2-C-1: Promote, provide and distribute the City's Net Zero Energy Building Guide document to local home shows or remodeler showcase events, designers, homebuilder associations, and realtors. Include the City's Net Zero Energy Building Guide and Solar Ready Guideline documents on the City's Design Guidelines web page.
- EB2-C-2: Provide training on solar ready and net-zero strategies as found in the City's Net Zero Energy Building Guide and Solar Ready Guidelines to area homeowners, multi-family building owners, local builders association, and real estate agents. Goal: 1% market coverage (300 households) attending training annually.

CAP Goal EB 3: Support decarbonization of the local electricity grid.

Strategy EB 3-A: Support Duke Energy's grid emissions goal of 50% below 2005 levels by 2030.

Not Started:

- EB3-A-1: Collaborate with Duke Energy for the development of a pilot/demonstration community solar program achieving a total of 7,000 MWH in subscribed annual community solar energy by 2030. Identify underutilized sites such as landfill, brownfield, Superfund sites, or detention pond sites (for floating solar) and identify most advantageous site to develop and install pilot solar garden. Collaboratively develop and issue an RFP for community solar developers to advance community solar options and subscriptions within City. RFP shall focus on projects that benefit all residents, particularly communities of color and low-income populations. Include community solar option benefiting small businesses.

Strategy EB 3-B: Advocate for stronger state policy.

Not Started:

- EB3-B-1: Collaborate with other communities, industry, and state agencies to support the State establishing the enabling legislation for Commercial Property Assessed Clean Energy (C -PACE) and Residential Property Assisted Clean Energy (R-PACE) financing.
- EB3-B-2: Collaborate with other communities, industry, and state agencies to support the State in establishing policies and laws to expand the market for renewable energy, make it easier for large multi-family, commercial, and industrial customers to benefit from renewable energy (e.g. feed-in tariff, Power Purchase Agreements, Solar Lease agreements, roof space rental, community solar, virtual net metering, aggregated net metering, etc.) Include information on current State of Indiana related regulations and cost and payback information.

Strategy EB 4-A: Support and accelerate electrification of on-site fossil fuel combustion systems citywide by 2% of 2018 consumption levels (natural gas, propane, fuel oil, etc).

Not Started:

- EB4-A-1: Conduct an "Electrification Assessment and Action Plan" to outline actions and priorities for electrification of all City facilities to move towards zero on-site fossil fuel combustion. Work with regional energy partnerships to implement Plan for all City facilities. Include new and existing buildings, explore strategies to address electricity storage, and create a case study to highlight and share challenges, solutions, and lessons learned to share with the broader community.

Strategy EB 4-B: Support and accelerate low/no carbon alternatives to on-site fossil fuel combustion by 1% of 2018 consumption levels (natural gas, propane, fuel oil, etc).

Underway:

- EB4-B-2: As recommended by the City of Bloomington Waste To Energy Taskforce, the City should further investigate the potential of an aerobic digester wastewater-to-energy installation at the Dillman Road Wastewater Treatment Plant. Utilization of biogas as renewable natural gas source for city facilities, large corporate off taker, or community residents should be included in study.
- EB4-B-3: Study the potential of capturing beneficial use of landfilled solid waste stream through waste-to-energy strategies including zero emission plasma gasification, methane capture, and anaerobic digestion.

Not Started:

- EB4-B-1: Work with Vectren (Centerpoint) to establish an option for Renewable Natural Gas sourced from regional sources for residential and commercial customers. Program to include tracking for citywide natural gas reporting for GHG inventories. Achieve 5% use by 2030.

Goal EB 5: Increase financing options for Energy Efficiency and Renewable Energy projects citywide.

Strategy EB 5-A: Promote Equity in Energy and Resource Costs and Ownership

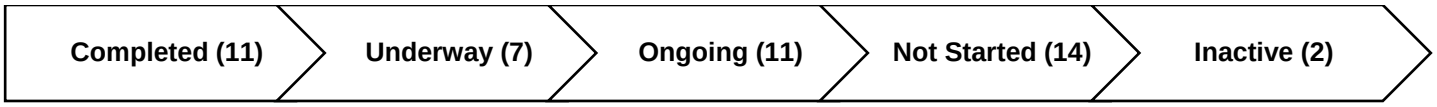
Completed:

- ✓ EB-A-3: Establish a Recover Forward energy fund to invest in energy efficiency and renewable energy projects with a focus on supporting improved equity in Renewable Energy and Energy Efficiency in the community.

Not Started:

- EB5-A-1: Develop partnerships with low-income and supportive housing serving organizations, the County, and the Bloomington Housing Authority to ensure that efficiency and renewable programs, incentives, and practices, meet the specific needs of these populations.
- EB5-A-2: Collaborate with Duke Energy and Vectren (Centerpoint) to increase energy efficiency funding options for families including low-interest financing, on-bill financing, Pay as You Save, and other programs as determined to be most effective.
- EB5-A-4: Collaborate with partners such as Citizens Action Coalition to establish and regularly host utility bill clinics similar to those offered by Minnesota Citizens Utility Board to help residents understand their bills, discuss energy savings options, and hear about rebate/incentive availability and clean energy options.

Transportation



SAP GOAL 3.1: Ensure Five Urban Village Centers meet the criteria established in the Comprehensive Plan by 2023.

Completed**:**

- ✓ 3.1.a. Establish an inter-departmental team to organize resources and expertise needed to establish Urban Village Centers and identify five priority focus areas that would have maximum community impact and improve social equity.
- ✓ 3.1.b. Incorporate electric vehicle charging stations into sustainable development incentives to influence common infrastructure at Urban Village Centers.
- ✓ 3.1.d. Attract a variety of amenities to locate in or near priority Village Centers.
- ✓ 3.1.e. Implement appropriate multi-modal projects in priority Village Centers, emphasizing those identified in the 2018 Bloomington Transportation Plan; with streets that provide safe access for visitors of all levels of ability.
- ✓ 3.1.f. Locate planned affordable housing within or nearby Village Centers or collaborate to pilot affordable housing in the vicinity.

Ongoing:

- 3.1.c. Establish an infill development program to inventory vacant or underused lots, help ensure infill areas are build-ready when possible, and offer financial incentives to spur development of compact communities and prevent urban sprawl.

SAP GOAL 3.2: Shift the Bloomington Community transportation commute mode split to 60 percent Single Occupancy Vehicle by 2022, compared to a baseline of 62.8 percent in 2016 (as measured in the American Community Survey).

Completed:

- ✓ 3.2.a. Work with businesses to expand bicycle parking and encourage participation in the American League of Cyclists Bicycle Friendly Business program.
- ✓ 3.2.b. Expand the use of marketing efforts for bike share program.
- ✓ 3.2.c. Create a campaign to encourage use of car share programs in lieu of automobile ownership through marketing and incentives.
- ✓ 3.2.d. Develop a program to encourage local businesses and major employers to establish commute trip reduction programs, including incentives for multi-modal transportation and an emergency ride home program for individuals who don't drive to work alone.

SAP GOAL 3.3: Achieve bicycle and pedestrian fatality rates of zero by 2023.

Ongoing:

- 3.3.a. Encourage citizen use of UReport mechanism to report safety issues.
- 3.3.c. Develop schedule for improvements and implement at most dangerous intersections, as identified by the Bloomington Monroe County Metropolitan Planning Organization.

Not Started:

- 3.3.b. Adopt a Vision Zero Policy to signal commitment to zero safety incidents in the community.
- 3.3.d. Implement a 4 to 5 second vehicle traffic signal delay after pedestrian lights indicate "walk" so that pedestrians and cyclists have time to become visible before automobiles are given the green light.

SAP GOAL 3.4: Achieve the Walk Friendly Communities Platinum level designation by 2022.

Ongoing:

- 3.4.c. Implement recommended projects in 2018 Transportation Plan to increase the miles of pedestrian pathways and sidewalks that support multi-modal transportation.

Inactive:

- 3.4.a. Host a "Walking to Platinum" community summit to identify priority actions and opportunities to enhance walkability in Bloomington.
- 3.4.b. Focus priorities for infrastructure investment using Walk Scores, Urban Village Center designations and socio-economic data.

SAP GOAL 3.5: Achieve the League of American Bicyclists Platinum Rating by 2022.

Underway:

- 3.5.a. Develop a new Complete Streets Policy and Design Guidebook

Ongoing:

- 3.5.c. Encourage people walking and bicycling to report lighting issues and maintenance needs and issues (i.e., pothole repair and debris removal) with the UReport app
- 3.5.d. Increase safe and secure bicycle parking through covered parking and indoor options
- 3.5.e. Increase the miles of bicycle facilities, including those recommended in the 2018 Transportation Plan and Transform 2040 Plan

Not Started:

- 3.5.b. Develop and implement a plan for improved lighting on bicycle paths

SAP GOAL 3.6: Increase the use of the Bloomington Transit system 5 percent by 2023, relative to a baseline of 3.3 million transit users in 2017.

Completed:

- ✓ 3.6.b. Assess Walk Score ratings for public transit for Bloomington's 56 neighborhoods to determine needed route improvements

Ongoing:

- 3.6.a. Expand "Way-To-Go" user-training program offered by BT and monitor participation rates

Not Started:

- 3.6.c. Create a marketing campaign to minimize first-time user apprehension, such as online "how-to" guides for safe use of public transit, a mentor program to partner first-time transit users with experienced riders, and educational campaigns designed specifically for youth riders.
- 3.6.d. Make all youth tickets on BT free
- 3.6.e. Collaborate with employers to provide transit benefits programs that promote use of public transit

CAP Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.

Strategy TL 1-B: Increase bicycle/pedestrian commuting from 17% to 18% by creating infrastructure to better encourage alternatives to vehicles.

Ongoing:

- TL1-B-2: Implement the Multimodal Projects recommendations included in the 2019 City of Bloomington Transportation Plan and BMCMPO's Transportation Improvement Program.

Strategy TL 1-C: Increase transit utilization by 10% over 2018 passenger miles by 2030 through infrastructure and frequency investments.

Completed:

- ✓ TL1-C-1: Implement recommendations of the Bloomington Route Optimization Study.

Underway:

- ❖ TL1-C-3: Identify and implement micro-transit options as appropriate to improve access to and accessibility of transit system for portions of the community not yet well served, particularly serving vulnerable populations

Not Started:

- ▪ TL1-C-2: Collaborate with Bloomington Transit and/or other providers to establish a Guaranteed Ride Home program. Guaranteed Ride Home is a free reimbursement program for registered commuters. Its purpose is to minimize the chance of being “stuck at work” due to limited transit schedules, like express routes that only travel in one direction at certain times during the day.

Strategy TL 1-D: Increase shared mobility (carpooling) utilization by 3% of work commute trips.

Ongoing:

- ○ TL1-D-1: Outline clear policies for electric bikes, skateboards and scooters on city bike lanes, paths and trails. Establish a communication campaign to effectively reach users.

Not Started:

- ▪ TL1-D-2: Establish a subsidy / incentive for EV car sharing services with the goal of increasing car share coverage, particularly among vulnerable populations and those without current vehicle access. Qualifying programs must use plug in EV's or other law and no-carbon vehicle alternatives only.

Strategy TL 1-E: Encourage density and increase housing options and affordability with the goal of increasing gross density by 3% of 2018 values.

Underway:

- ❖ TL1-E-1: Encourage development of accessory dwelling units ("ADU") to create additional legal ADUs compatible with residential neighborhoods. This will add additional housing options for the City’s workforce, seniors, families with changing needs, and others for whom ADUs present an affordable housing option.
- ❖ TL1-E-3: Continue assessment and review of Unified Development Ordinance for identification of zoning modifications to encourage appropriate increased density, increased community "walkability," and decreased reliance on automobile use.

Not Started:

- ▪ TL1-E-2: Reevaluate minimum parking requirements in the Unified Development Ordinance as listed in Table 04-9: Minimum Vehicle Parking Requirements. Require parking for all modes of travel in project design, as appropriate.

Strategy TL 1-F: Build Complete Streets; goal 10% increase in Complete Street coverage by 2030.

Underway:

- ❖ TL1-F-1: Review, modify, and adopt a revised BMCMPO Complete Streets Policy to add criteria and review procedures for City funded projects. Include in the review and modification an assessment of national best practices in support of achieving the goals of the Climate Action Plan.

Not Started:

- ▪ TL1-F-2: Conduct a Sidewalk and Bike Path Quality Assessment and Master Plan to identify needs to accelerate bike paths, building sidewalks, crosswalks, and other walking infrastructure, particularly in high-need areas and areas serving vulnerable populations. Create an implementation plan establishing annual increases in the total miles of sidewalks, on-road bicycle lanes and multi-use paths

Strategy TL 1-G: Increase pedestrian access and safety.

Completed:

- ✓ TL1-G-2: Create and implement a 5 year transportation funding plan that matches the MPO Metropolitan Transportation Plan and 2019 Transportation Plan.

Ongoing:

- TL1-G-1: Implement improvement recommendations of the 2019 Transit Stop Safety and Accessibility Assessment.

Strategy TL 1-H: Reduce commercial/industrial vehicle use by 8% of 2018 values.

Not Started:

- TL1-H-1: Establish an Electric Vehicle Suitability and Fleet Optimization Study utilizing fleet monitoring technology to assess fleets for alternative fuel suitability as well as identify fleet optimization management options for reduced VMT.

Strategy TL 1-I: Reduce citywide off-road and lawn equipment annual emissions to below 35,000 metric tons.

Underway:

- TL1-I-1 Introduce a policy to replace City off-road and lawn equipment with electric and low carbon fuel alternative options at the time of replacement with traditional internal combustion engine (ICE) as optional requiring proof of need. Establish emissions standards, testing and biofuel preference for any combustion vehicles remaining in the equipment fleet. Encourage County, School District, and Indiana University to develop and implement their own policies.

Strategy TL 2-A: Transition City fleet to electric vehicle and alternative fuels (hybrid/ hybrid electric, plug in hybrid electric).

Underway:

- ❖ TL2-A-1: Introduce a policy to replace City fleet vehicles and buses with electric and hybrid options at the time of replacement, and require emissions standards, testing and biofuel preference for any combustion vehicles remaining in the fleet.

Strategy TL 2-B: Support and encourage electric vehicle and alternative fuel (hybrid/ hybrid electric, plug in hybrid electric) vehicle adoption citywide.

Not Started:

- TL2-B-1: Coordinate with Monroe County and State of Indiana to establish an annual auto registration reporting process to monitor the adoption rate of electric vehicles in the City.
- TL2-B-2: Create an Electric Vehicle (EV) Action Plan to guide access to chargers on City property and citywide, explore alternative technologies like smart cable technology and streetlight/EV charger integration, address barriers to charging for garage-free homes and rental properties, increase use of EVs in car sharing programs, assess options to lower EV and EV charger implementation costs, and recommend EV charging station requirement amendments to the Unified Development Ordinance to support EV plan. Coordinate with ERI or Purdue to establish tracking of EV registration within the community.
- TL2-B-3: Support electric car charging station infrastructure in new commercial and multifamily housing during the initial construction phase by providing information on appropriate conduit and electrical panel considerations as a part of permit application process. Collaborate with electric utility to develop and provide information on utility, local, State, and Federal incentives supporting EV infrastructure.

Waste Management

SAP GOAL 5.1: Divert at least 40 percent of the volume of residential waste collected by City Sanitation from being landfilled by 2023.

Completed:

- ✓ 5.1.b. Provide community support for the annual Hoosier to Hoosier Community Sale.

Underway:

- ❖ 5.1.e. Develop a prioritized plan for expanding participation in the Green Business Network, focusing on increased recycling participation by multi-family and commercial participants.
- ❖ 5.1.g. Create a composting program for both residential and commercial food waste.

Not Started:

- 5.1.a. Conduct a waste characterization study of sample households in Bloomington, with an associated education and outreach campaign for improved recycling techniques and reduced contamination levels.
- 5.1.c. Create a community waste reduction campaign targeted at businesses and citizens.
- 5.1.f. Establish a voluntary program with the construction industry to divert construction waste from the landfill and provide incentives and recognition for participants.
- 5.1.h. Explore the long-term opportunity for a Materials Recovery Facility in Bloomington.

Inactive:

- ◆ 5.1.d. Create and implement a sustainable business certification program that includes opportunities to report recycling rates and offers sectoral guidance for sustainable business practices.

CAP Goal WM 1 Increase landfill solid waste diversion by 30% of 2018 values (26,500 tons of waste reduction).

Strategy WM 1-A: Increase organics diversion by 40% of 2018 values (from 33,900 tons - 38.4% of community mixed waste based on private hauler data - to 20,300).

Underway:

- ❖ WM1-A-1: Create a pilot "Food Scraps Bag" pilot program to test food scraps composting collection across restaurant, commercial and residential customer base where food scrap bags are separated at landfill without separate compost bins and collection vehicles.

Not Started:

- WM1-A-2: Establish a “Towards Zero Waste Certification” program to provide education to food retailers and restaurants on strategies to reduce waste and to promote businesses successfully achieving certification levels. Goal: 20 additional businesses enrolled annually.
- WM1-A-3: Coordinate with local food banks to support edible food donation through coordination with the food bank and donations from City and community partner events. Explore expansion of effort by identifying food retailer and restaurant partners for increased participation and support.

Strategy WM 1-B: Increase recyclables diversion by 35% of 2018 values (from 28,000 tons - 31.7% of community mixed waste based on private hauler data - to 18,200).

Underway:

- ❖ WM1-B-2: Conduct outreach to determine what assistance may be needed to increase recycling, organics collection, and composting.

Not Started:

- WM1-B-1: Ensure that recycling in schools, City buildings, public housing, and public spaces is fully implemented. Conduct a study to determine which facilities do not currently have recycling or could have recycling diversion significantly improved. Coordinate with those facilities to improve recycling participation.

Strategy WM 1-C: Increase diversion of potential recoverables by 33% of 2018 values.

Not Started:

- WM1-C-1: Develop and fund a waste audit and diversion assistance program for businesses. Program to support businesses in establishing tracking and reporting waste streams, identify reduction, diversion, beneficial use opportunities, identification of potential financing sources, and connect businesses with energy audit and other resources in support of full CAP goals. Goal: 60 business waste audits completed annually with businesses engaged in measuring and diverting waste
- WM1-C-2: Conduct a Beneficial Use Study to identify greatest beneficial use opportunities present in current City solid waste streams. Study to estimate potential return on investment and identify job and economic development potential associated with opportunities. Research/identify pilot project opportunities to explore capture of benefit.

Strategy WM 1-D: Support waste reduction through policy and operational refinements.

Not Started:

- WM1-D-1: Establish a Zero Waste policy for City operations that outlines increasing incremental annual waste reduction goals charting a path to Zero Waste. Policy to require that outside users of City facilities also follow Zero Waste policy and will modify the event permit application to require the inclusion of recycling and composting at events.

Strategy WM 1-E: Expanded recycling and organics options for multi-family residents.

Not Started:

- WM1-E-1: Based on results of outreach action WM1-B-2, identify financial and other barriers to recycling and composting in multi-family buildings (e.g., different priorities between property management companies and tenants, lack of knowledge of costs).
- WM1-E-2: Based on results of outreach action WM1-B-2, and action WM1-E-1, explore creation of additional collection drop off sites.
- WM1-E-3: Make a brochure that can be used by landlords to give info to their residents to assure developers and apartment owners help residents know about park locations, bike/ walk/transit info, sustainability goals and resources, trash and recycling opportunities, renewable energy options, incentives, etc. Brochure can be distributed as a part of the Rental Licensing program in addition to other avenues.

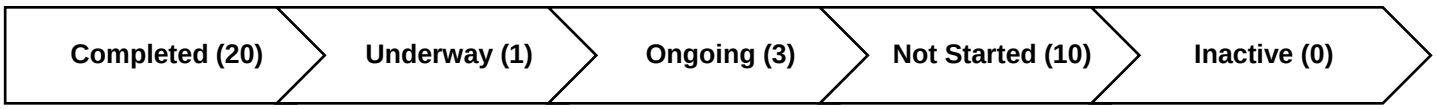
Goal WM 2 Educate, motivate, and empower the public to achieve waste reduction and diversion.

Strategy WM 2-A: Create, implement, and promote public awareness and education campaigns.

Ongoing:

- WM2-A-1: Create a comprehensive communication campaign to provide standardized information and communications on waste reduction, recycling, and organics collection options to reach the residential sector.

Water & Wastewater



SAP GOAL 6.1: Reduce Per Capita Daily Water Consumption 20 percent by 2023, relative to a baseline of 96.2 gallons in 2016.

Completed:
- ✓ 6.1.c. Implement advanced metering infrastructure to allow remote meter readings, assist with identification of leaks, and provide customers with more detailed usage data.

Ongoing:
- 6.1.a. Develop an enhanced public education campaign to encourage water conservation, with a focus on peak summer month water use.

Not Started:
- 6.1.b. Develop home leak detection repair program for low-income individuals.
- 6.1.d. Review and update drought contingency policies in the event of future emergencies.
- 6.1.e. Establish rain sensor irrigation rebate program and provide information on appropriate sensor settings.
- 6.1.f. Explore options for implementing water rates to encourage conservation.

SAP GOAL 6.2: Participate in at least two partnerships designed to improve surface water quality in Monroe County by 2023.

Completed:
- ✓ 6.2.a. Pursue Clean Water Act 319 grants for efforts to clean and protect Bloomington area watersheds through collaborations with community partners.
- ✓ 6.2.b. Begin implementation of approved Clean Water Act 319 programs and monitor progress by assessing populations of pollution intolerant invertebrates.

SAP GOAL 6.3: Expand participation in City-led surface water quality programs, compared to a 2019 baseline.

Completed:
- ✓ 6.3.b. Evaluate development of a SMART goal for increasing the participation in City-led surface water quality programs, per the development of a 2019 baseline
- ✓ 6.3.c. Sponsor promotional efforts aimed at increasing participation in these educational programs

SAP GOAL 6.4: Increase the number of green infrastructure features in the Bloomington community to improve stormwater quality, compared to a 2019 baseline.

Completed:
- ✓ 6.4.b. Evaluate the development of a SMART goal for increasing the number of community green infrastructure features, per the development of a 2019 baseline.
- ✓ 6.4.c. Develop an educational program and hands-on demonstrations teaching resident responsibility regarding stormwater management, best practices for stormwater pollution prevention, and financial assistance programs.
- ✓ 6.4.d. Conduct rain garden, stormwater and green infrastructure tours.

Not Started:
- 6.4.a. Establish a 2019 baseline for the number of community green infrastructure features designed to improve stormwater quality by encouraging the community to report green infrastructure on the Green Spots or other relevant website.
- 6.4.e. Offer stormwater billing credits for residents who implement green infrastructure projects.

SAP GOAL 6.5: Decrease the number of impaired water bodies in Monroe County by 2023, compared to a baseline number of 21 in 2016.

Completed:

- ✓ 6.5.a. Expand educational programs to educate residents, businesses and schools about stormwater management responsibilities and issues using the "Only Rain Down the Drain" campaign as reference.
- ✓ 6.5.b. Engage in marketing efforts to increase participation in voluntary stormwater pollution prevention programs.
- ✓ 6.5.c. Develop UReport mechanism for reporting of illicit discharges and promote citizen reporting capability.
- ✓ 6.5.d. Inventory and begin necessary infrastructure improvements to the stormwater system.

SAP GOAL 6.6: Eliminate all chronic sewer overflow locations, up to a certain magnitude storm event (exact metric to be determined by CBU staff).

Completed:

- ✓ 6.6.b. Invest in an Inflow and Infiltration Program to eliminate leaks in sewer mains.
- ✓ 6.6.d. Invest in major infrastructure improvements to increase collection capacity and eliminate locations of chronic overflows, e.g. the College Mall Rd. sewer interceptor.

Ongoing:

- 6.6.a. Continue to be vigilant about grease and sewer inspections to prevent one-time overflow events.

Not Started:

- 6.6.c. Implement a Clear Water Program, possibly including ordinance changes, to eliminate illicit connections of sump pumps, downspouts and other illegal connections to sanitary sewers.

CAP Goal W 1 Decrease potable water consumption by 3% of 2018 values.

Strategy W 1-A: Promote increased water conservation citywide.

Not Started:

- W1-A-1: Facilitate reduction of water use by top 20 customers through an opt-in program. Offer free technical resources to large institutions and businesses to identify specific opportunities for employees or customers to conserve water and incorporate water efficiency into internal operations.
- W1-A-2: Accelerate the installation of low-flow water fixtures in residential homes and expand the program to commercial businesses. Goal: achieve 100 households and 10 businesses upgraded annually.

Strategy W 1-B: Maintain and update city plans and standards in support water conservation goals.

Not Started:

- W1-B-1 Evaluate the potential to update the City's Green Building Ordinance to include installation of rainwater collection systems at City facilities for graywater uses, and investigate opportunities for graywater reuse at existing and new City facilities and properties. Implement graywater systems identified capable of reducing energy/water demand in other areas (i.e. watering urban tree canopy to reduce heat island effect and air conditioning needs).

CAP Goal W 2 Maintain source and drinking water quality through climate related challenges.

Strategy W 2-A: Improve water quality protections and awareness.

Completed:

- ✓ W2-A-1 Strengthen riparian/stream/wetland protection in local ordinances and regulations where feasible.

CAP Goal W 3 Reduce energy use associated with treating and transporting water and wastewater by 10% of 2018 values.

Strategy W 3-A: Reduce energy use associated with treating and transporting water and wastewater by 10% of 2018 values.

Completed:

- ✓ W3-A-1 Promote measures that reduce the energy needed to heat, treat and transport water, including continued evaluation of new hydroelectric and photovoltaic opportunities.

Strategy W 3-B: Capture and use of wastewater energy potential.

Underway:

- W3-B-1 Research into biogas opportunities at the City's wastewater treatment plant and explore opportunities for renewable natural gas development capacity.

CAP Goal W 4 Mitigate flood hazards and impacts.

Strategy W 4-A: Update design standards and plans for flood mitigation.

Completed:

- ✓ W4-A-2 Perform a flood risk assessment using historical data and future precipitation forecasts to identify areas and critical infrastructure vulnerable to flooding.

Ongoing:

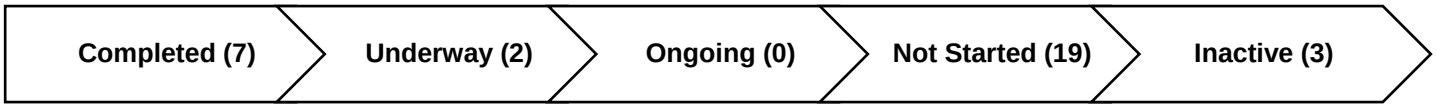
- W4-A-1 Review and update public infrastructure design standards and the City's Stormwater Management Plan to meet climate change projections for Bloomington.

Strategy W 4-B: Increase green infrastructure capacities citywide.

Completed:

- ✓ W4-B-1 Promote native landscaping to help restore and conserve natural habitats and avoid turf grass.
- ✓ W4-B-2 Encourage use of rain gardens at public agency sites as well as commercial and residential sites.
- ✓ W4-B-3 Add stormwater absorption features, such as bioswales, rain gardens, and pervious pavement systems to City-owned space.

Local Food & Agriculture



SAP GOAL 4.1: Increase access to healthy, local food relative to 2019 baseline levels, as defined by a community survey developed in coordination with the City and community partners.

Completed:

- ✓ 4.1.a. Develop an annual community survey designed to evaluate changes in healthy food access over time
- ✓ 4.1.b. Develop a food system asset map of existing groups and efforts related to the functional food system (transportation, etc.) and social support services (restaurants, food banks, etc.)

Underway:

- 4.1.c. Coordinate community efforts to address root causes of food insecurity, healthy food access, productive reuse of vacant land, and economic opportunities and education around the local food system.

Not Started:

- 4.1.d. Design and host quarterly, community Healthy Food Fairs, where people can sign up for SNAP and MCCSC food programs, learn about local food resources, etc., and supplement fairs with a web presence to provide access to all resources in one spot.

- 4.1.e. Evaluate the development of a SMART goal for increasing access to healthy, local food per the results of the 2019 survey and baseline development.
- 4.1.g. Establish a refrigerated food truck program to transport healthy foods to food deserts.
- 4.1.h. Collaborate with convenience stores to expand healthy food offerings.

Inactive
- 4.1.f. Implement the Stock Healthy, Shop Healthy community program to improve access to healthy, affordable foods by working with small food retailers.
- 4.1.j. Determine the potential for produce prescription program to enable doctors to prescribe produce for health issues experienced among individuals with low access to healthy, local food, and implement if feasible

SAP GOAL 4.2: Increase the area of food gardens within the community, compared to a 2019 baseline.

Completed:
- ✓ 4.2.a. Establish a 2019 baseline for the number and size of gardens in the community used to grow food for personal consumption or sale, and a mechanism for tracking this data moving forward.
- ✓ 4.2.d. Add 39 raised garden beds at Switchyard Park.

Not Started:
- 4.2.b. Develop a consultation and implementation program to create additional gardens at community locations interested in sponsoring a garden for individuals affiliated with their organization (e.g. churches, neighborhood associations).
- 4.2.c. Evaluate the development of a SMART goal for increasing the area of food gardens in the community, per the results of the 2019 survey and baseline development.
- 4.2.e. Place a garden in all committed elementary schools and other organizations and provide consultation on establishment and maintenance.
- 4.2.f. Collaborate with Bloomington Housing Authority (BHA) to ensure public housing residents have access to sufficient gardening space, tools, and other resources needed to be successful.

Inactive:
- 4.2.g. Facilitate a guided tour of farms and gardens within city limits to inspire and encourage acceptance of vegetative alternative practices.

SAP GOAL 4.3: Increase the percentage of food that large institutional buyers purchase from local farmers (defined as farmers in the state of Indiana) by 2023, compared to a 2019 baseline.

Completed:
- ✓ 4.3.a. Establish a 2019 baseline measurement of total value and percentage of local food purchases for large institutional buyers, and a mechanism for tracking this information moving forward.
- ✓ 4.3.c. Host a community meeting with institutional buyers and local growers to identify challenges and opportunities for collaboration.
- ✓ 4.3.d. Evaluate the development of a SMART goal for increasing the percentage of food purchased by large institutional buyers from local farmers, per the development of a 2019 baseline.

Not Started:
- 4.3.b. Hire a local full-time value chain coordinator for the City of Bloomington to assist with initiatives to create economic opportunities for farmers and gardeners.
- 4.3.e. Conduct research on locations of nearby processing facilities to determine how shared community resources (i.e. grain mills, mobile abattoirs, food storage, root cellars, refrigeration) are structured in other communities to provide support for small local farmers.

CAP Goal FA 1 Increase food and nutrition security citywide.

Strategy FA 1-A: Address financial food insecurity.

Not Started:
- FA1-A-1 Explore potential of collaborating with low cost produce providers to establish local food markets serving low income, vulnerable, and food insecure communities while addressing retail and commercial food waste.

Strategy FA 1-B: Improve food access.

Underway:

- FA1-B-3 Collaborate with convenience stores and food pantries to incentivize the purchase and distribution of affordable, fresh foods.

Not Started:

- FA1-B-1 Conduct a detailed Food Security Assessment to determine food insecurity conditions within the City, areas with limited access to full service grocery stores and markets (particularly within areas of higher vulnerable populations), identify areas within the City for improvement, and establish detailed strategies to increase food security within City.
- FA1-B-2 Support senior programs that involve both food and community such as volunteering or donating to local charities

CAP Goal FA 2 Increase local agricultural resilience to climate shocks.

Strategy FA 2-A: Provide information and promote climate responsive agriculture practices.

Not Started:

- FA2-A-1 Collaborate with the Monroe County School Corporation, Monroe County, Indiana University, Monroe County Farmer's Association, Indiana Grown, and local organic farmers associations to encourage adoption of strategies to increase soil health and increased carbon sequestration for Croplands and Grazing Lands.

Strategy FA 2-B: Support climate resilient agriculture through City plans and programs.

Not Started:

- FA2-B-1 Collaborate with Monroe County to develop a comprehensive farmland conservation plan that prioritizes food production while taking into consideration other Bloomington greenspace and climate adaptation priorities. The plan could also include specific maps or areas prioritized for farmland conservation or identify those areas most at risk from development or climate change impacts. Program should focus on exploring increased local food-to-table, local food utilization, and local development of cultural food products in support of Bloomington area underserved communities.

CAP Goal FA 3 Increase and stabilize local food market.

Strategy FA 3-A: Increase local food supply.

Not Started:

- FA3-A-1: Fund a Local Food Coordinator position with an annual budget for activities and initiatives to focus on a values-based supply chain for buyers in the City. Working with City officials, this coordinating professional will define the climate values (i.e., local, soil health, animal welfare, fair wages, nutritionally dense, etc.) and define the foodshed or geographic area of food production that the City can influence through policy
- FA3-A-2: Revise zoning ordinances to remove barriers to urban agriculture: yard and rooftop food production, edible landscaping and foraging. Examine and pursue other policy levers to increase food production within the City. Utilize available and appropriate Parks and Recreation lands for urban farming and food production.
- FA3-A-3: Assess, develop, and adopt financial incentives through CDFI and CDBG programs to recruit and support the startup of small and mid-sized food processors in the City.

Strategy FA 3-B: Strengthen demand for local foods.

Not Started:

- FA3-B-1 Pass city policy to procure locally grown and organic foods for events and other organized food catering at city-managed facilities. Coordinate with School District, Indiana University, County, and local hospitals to establish similar locally sourced foods procurement policies. Explore development of group purchasing and logistics agreements to increase efficiency of local farm-to-agency process.

Health & Safety

CAP Goal HS 1: Educate, engage, and empower the public for climate health and safety.

Strategy HS 1-A: Improve training to address risks exacerbated by climate change.

Ongoing:

- HS1-A-1 Ensure public safety staff are properly trained to recognize and respond to physical and behavioral signs of heat-related illness.

Not Started:

- HS1-A-2 Strengthen emergency management capacity to prepare for and respond to the impacts of climate change. The City should prioritize capacity improvements such as training and equipment to address risks exacerbated by climate change - see the City of Bloomington Climate Risk and Vulnerability Assessment 2020. Emergency management should be equipped to address the possibility of multiple emergencies at the same time, such as the combination of extreme heat and power outage.

Strategy HS 1-B: Establish and expand public health communication campaigns.

Not Started:

- HS1-B-1 Develop a climate change public health communication campaign to reach those without access to internet or technology, limited English speakers, and individuals in hard to reach vulnerable populations.
- HS1-B-2 Increase public education and outreach about the basics of climate change and how it will affect the community. Consider inclusion of explanation of exponential rates of change if global tipping points are met.

CAP Goal HS 2: Prepare Bloomington for climate risks and impacts.

Strategy HS 2-A: Strengthen community response capacity and support networks.

Underway:

- HS2-A-1 Enhance community networks and connections for those who require special attention, such as the elderly, homebound, disabled, isolated, or those likely to be in need of financial assistance during or after extreme weather events (heat, cold and heavy precipitation).

Strategy HS 2-B: Improve equity of climate adaptation measures.

Not Started:

- HS2-B-1 Utilize current science, best practices and updated maps of flooding and flash flooding potential, micro heat island vulnerability, and populations most vulnerable to flooding and heat impacts to help inform decisions and priorities about projects, project approvals, and programs that help to cool the urban environment.

CAP Goal HS 3 Respond to climate risks and impacts.

Strategy HS 3-A: Assist the city's heat, flooding, and storm vulnerable population in preparing for and mitigating climate change impacts.

Not Started:

- HS3-A-1 Seek to reduce exposure to extreme heat and improve stormwater damage by promoting, distributing, or providing installation assistance of shade trees focused on community areas identified as having high heat island impact based on City's Citywide Ground Cover and Heat Island Assessment (see Greenspace section, strategy G 3-A) and/or flash flood prone. Assistance should prioritize vulnerable populations.
- HS3-A-2 Offer on-site and on-line flood assessments and readiness improvements to residents within flood and flash flood prone areas.

- HS3-A-3 Create a flood risk education campaign including development of an online education hub with information, tools and resources.

Strategy HS 3-B: Establish a climate impacts mutual aid program.

Not Started:

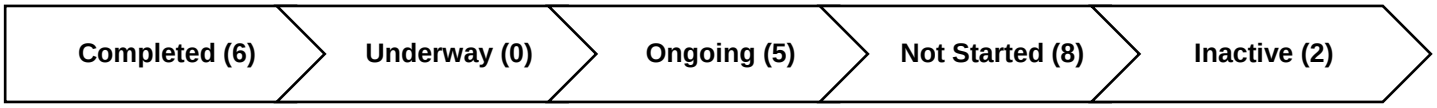
- HS3-B-1 Coordinate with County, State, Indiana University, surrounding communities, non-profit agencies, and utilities to establish a Mutual Aid and Response program. Program to focus on range of current and projected risks and hazards including flooding, extreme weather, storms, power outage, and emergency debris management.

Strategy HS 3-C: Establish and update plans to address climate risks and impacts.

Underway:

- HS3-C-1 Coordinate with County, Indiana University, Red Cross, and utilities to develop a debris management plan to support response to severe storm events and flooding. Explore potential of integrating HAND neighborhood cleanup grants into plan.

Greenspace & Ecosystem Health



GOAL 7.1: Conserve greenspace and enhance 100 acres of habitat in priority areas surrounding Clear Creek, Griffy Lake, and Jackson Creek by 2023.

Completed:

- ✓ 7.1.a. Ensure consideration of smart growth principles in future land use decisions to preserve important green spaces.
- ✓ 7.1.b. Establish a volunteer program to assist with habitat restoration plans on public and private properties.
- ✓ 7.1.d. Create and implement a public education campaign highlighting benefits of biodiversity and habitat connectivity, the National Wildlife Federation certified habitat program, and reporting on the GreenSpots website.

Ongoing:

- 7.1.c. Develop and implement a plan for restoration in each priority area and establish a habitat corridor between Griffy Lake and Clear Creek, pursuing funding from Clean Water Indiana for implementation assistance.

GOAL 7.2: Remove 100 acres of invasive plants on public lands and 100 acres on private lands by 2023.

Completed:

- ✓ 7.2.c. Include requirements for native plants in all future landscaping plans.
- ✓ 7.2.d. Create native plants demonstration and education sites with plant details at Switchyard Park and/or other City parks.
- ✓ 7.2.e. Develop coordinated community campaign encouraging removal of invasive plants, communicating benefits of native plants, and encouraging reporting on the Green Spots website.

Ongoing:

- 7.2.g. Develop and implement prioritized plans for removal/ management of invasive species on public properties, emphasizing Griffy Lake, Leonard Springs, Upper Cascades, Lower Cascades, and Olcott Park.

Not Started:

- 7.2.f. Create an educational campaign on the most effective methods of deer management and deer-resistant plants.

Inactive:

- 7.2.a. Begin mapping acreage of invasive species removal with Garmin system and report on Green Spots Website to track progress over time.
- 7.2.b. Develop a public education program to enhance public participation in invasive removal efforts through reporting species via the EDDMap application and the Adopt-an-Acre program.

CAP Goal G 1: Increase quantity and quality of greenspace within the community.

Strategy G 1-A: Establish city greenspace plans integrating findings and goals of Climate Action Plan.

Not Started:

- G1-A-1 Complete a Land Conversion Opportunity Study. Analyze public and private property for unused turf and impervious areas, and create a Ground Cover Conversion Implementation plan by census tract to convert identified areas to native grasslands, wetlands, shrub, and forested areas. Identify incentive opportunities and establish an outreach campaign.

Strategy G 1-B: Improve the connectivity and functionality of greenspaces within the city.

Not Started:

- G1-B-1: Enhance the connectivity of greenbelt and habitat corridors across the community, including identification and improvement of "pollinator corridors" and "wildlife corridors."

CAP Goal G 2: Increase quantity and quality of climate adaptive native habitats.

Strategy G 2-A: Create and expand native habitat policies and infrastructure.

Ongoing:

- G2-A-1 Create a policy requiring the use of native plants in landscaping at City-owned properties unless a data-driven case can be made that such use is not appropriate.

Strategy G 2-B: Increase the use of native species and pollinator restoration areas.

Ongoing:

- G2-B-1 Install roadside climate-adaptive native vegetation that creates effective barriers to prevent drifting of air pollutants to adjacent schools, residences, and parks.

CAP Goal G 3: Increase citywide tree canopy coverage by 3% of 2018 values.

Strategy G 3-A: Establish city plans and policies in support of tree canopy and ground cover goals.

Not Started:

- G3-A-1 Conduct a Citywide Ground Cover and Heat Island Assessment. Assessment should include tree canopy, light-colored impervious surface, dark-colored impervious surface, grassland, and water coverage by census tract. Study should include heat island impact study to identify areas of high heat island contribution and impact. Findings of tree coverage, benefits, heat island impacts, and opportunities should be overlapped with vulnerable population mapping from the City's Climate Vulnerability Assessment.

Strategy G 3-B: Support and empower community partners, businesses and residents in meeting tree canopy goals.

Ongoing:

- G3-B-1 Create additional incentives for tree planting, particularly in prioritized areas within the City as established by the Citywide Ground Cover and Heat Island Assessment.

CAP Goal G 4: Reduce stormwater and micro heat island impacts.

Strategy G 4-A: Reduce impervious surfaces.

Not Started:

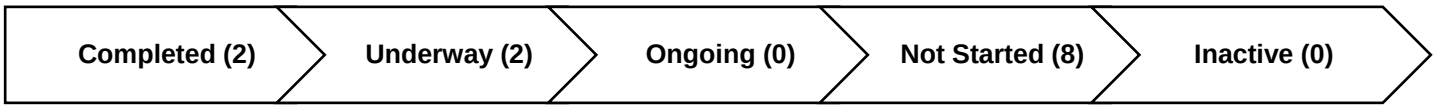
- G4-A-1: Create a "Living Streets" policy (Living Streets combines the concepts of complete streets and green streets, and also puts additional focus on quality of life aspects for City residents) to guide current and future street construction, reconstruction, and maintenance projects within the City.

Strategy G 4-B: Increase water uptake capacity of greenspace.

Not Started:

- G4-B-1: Implement a policy requiring a biochar (a carbon-rich product resulting from the pyrolysis of organic residues) soil amendment for all City building and earth working construction sites. Encourage biochar soil amendment use for private sector construction and earth working construction sites. Biochar improves soil carbon sequestration and builds carbon content of topsoil, and improves water retention and permeability characteristics.
- G4-B-2: Implement a policy to require soil profile rebuilding at new tree installations at all City building project sites or compacted soil conditions to reduce erosion and runoff contaminated with fertilizers, increase soil carbon stores and support long-term soil building. Encourage soil profile rebuilding for private sector building project sites or compacted soil conditions.

Climate Economy



CAP Goal CE 1: Build marketplace climate resilience.

Strategy CE 1-A: Evaluate climate risks to businesses.

Not Started:

- CE1-A-1: Collaborate with businesses to identify industry specific economic impacts Bloomington businesses (particularly small businesses and disadvantaged group businesses) face based on the climate change based on risks and hazards identified in this report, the Climate Risk and Vulnerability Assessment, and the City/County emergency management response plan. Collaborate with businesses to Identify economic resilience strategies in response to those economic vulnerabilities and conduct outreach to industry groups and public-private partnerships to promote private sector investment addressing them.

Strategy CE 1-B: Accelerate the transition to a carbon free local economy.

Not Started:

- CE1-B-1: Work with local unions and businesses to ensure that apprenticeship program includes solar training.
- CE1-B-2: Explore the development of a job training and entrepreneurial development program similar to Operation Fresh Start. Program to focus on developing green jobs skills within vulnerable and underserved populations in local sustainable agriculture, energy efficiency audits and upgrades, renewable energy, and other skills that support the goals of the CAP.

- CE1-B-3: Explore supporting local low income solar installations through the development of a local SREC market and financing mechanisms to offset solar installation costs for low income residents and small businesses.

CAP Goal CE 2: Attract, create, and support businesses that are committed to sustainability and climate goals.

Strategy CE 2-A: Increase workforce development for the climate economy.

Underway:

- CE2-A-1: Establish a job training and entrepreneurial development program focused on jobs that reduce GHG emissions, or support climate adaptation and community resilience. Explore Operation Fresh Start as a model.

Strategy CE 2-B: Support Climate Economy economic development and new business creation.

Underway:

- CE2-B-2: Implement recommendations from the City of Bloomington Renewable Energy Potentials Study 2020. Prioritize utilization of local workforce and local renewable energy companies.

Not Started:

- CE2-B-1: Establish a Clean Energy business incubator to support the establishment of innovative energy efficiency and renewable energy business models within the community. Explore incorporation with Ivy Tech Community College.
- CE2-B-3: Partner with State and County waste management and local and regional recycling centers to establish a program to encourage and promote new entrepreneurial businesses advancing the use of recycled material feed stock, the utilization of organics composting, and "Circular Economy" concepts which further the goals of the CAP.

CAP Goal CE 3: Develop new mechanisms for financing City climate action plan implementation.

Strategy CE 3-A: Leverage existing financing pathways.

Completed:

- ✓ CE3-A-1: Explore adopting a tax financing mechanism such as a "resilience penny" property tax increase of $0.01 per $100 of assessed value and dedicate additional funds for climate mitigation and climate adaptation strategies. Funds may be used directly, or may be used as a repayment source for a bond issue. (ED-LIT)

Not Started:

- CE3-A-2: Establish a policy that designates City Electric and Natural Gas Franchise Fee Income as funding source for Climate Initiatives.

Strategy CE 3-B: Develop new financing pathways.

Completed:

- ✓ CE3-A-4: Adopt a "resilience penny" property tax increase of $0.01 per $100 of assessed value and dedicate additional funds for climate mitigation and climate adaptation strategies. Funds may be used directly, or may be used as a repayment source for a bond issue. (ED-LIT)

Not Started:

- CE3-A-5: Explore the potential of developing a "Carbon Impact Fee" similar to the City of Watsonville CA. Additional funds raised to be used for Climate Mitigation and Adaptation implementation. Increased revenue to be used to fund Climate Mitigation and Adaptation implementation with a focus on the actions and strategies which improve equity outcomes.

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