

# TABLE OF CONTENTS

| Introduction                | 1  | Waste                               | 14 |
|-----------------------------|----|-------------------------------------|----|
| City Operations             | 2  | Water                               | 16 |
| Climate Change & Adaptation | 5  | Local Food & Agriculture            | 19 |
| Energy & Built Environment  | 7  | Greenspace & Ecosystem Health       | 21 |
| Transportation              | 10 | Climate Economy and Health & Safety | 23 |
|                             |    | Appendix                            | 24 |

## INTRODUCTION

The 2021 Bloomington Sustainability and Climate Progress Report is a regularly scheduled update to Council about long-range implementation of both community plans, the 2018 Sustainability Action Plan and the 2021 Bloomington Climate Action Plan. The next scheduled update to Council will occur in April 2022 and will provide Council with additional updates on implementation progress. The City of Bloomington Climate Action Team will continue to meet to discuss progress and success, identify needs for additional support or resources needed to advance actions of the Climate Action Plan, and collaboratively discuss strategies for addressing more complex challenges. Past sustainability planning efforts and progress reports can be found at: <a href="mailto:bloomington.in.gov/sustainability">bloomington.in.gov/sustainability</a>.

### **CITY OPERATIONS**





Police Interceptor Patrol Vehicle

## Interceptor Vehicles, Police- SAP Goal 8.3, Reduce non-renewable City fleet vehicle fuel use

In 2020, the Bloomington Police Department (BPD) purchased ten Ford Police Interceptor patrol vehicles with hybrid powertrains. These hybrid vehicles will reduce BPD's overall fuel consumption due to reduced engine idling time and increased fuel economy when compared to conventional gasoline engines. Funding for the vehicles came from BPD's 2020 allotment from the Public Safety Local Income Tax (PS-LIT).



New Electric Bus

#### Electric Buses, Bloomington Transit- SAP Goal 8.4, Reduce non-renewable Bloomington Transit fuel use

In 2019, The Federal Transit Administration (FTA) announced that the agency would fully fund the Bloomington Public Transportation Corporation (BPTC)'s request for a federal Low or No Emission (Low-No) Grant in the amount of \$284,799 to complete the funding of the transit agency's second battery-electric bus. In 2020, The Federal Transit Administration subsequently awarded Bloomington Transit \$3.2 million to purchase a total of four battery electric buses along with charging stations. Bloomington Transit's local match was \$800,000 as part of the project. Included in the 2022 proposed budget is the replacement of four 35-foot 2008 hybrid buses with four battery electric buses. Bloomington Transit is conducting an electrical infrastructure assessment to support charging infrastructure for 10 all-electric buses.



Aerial view of City Maintenance Facilities

### **CITY OPERATIONS**





Switchyard Pavilion

## Switchyard Pavilion, Parks & Recreation- SAP Goal 2.2, 8.2, 8.10- increase sustainable building certifications, reduce non-renewable energy use and remove invasive species

LEED (Leadership in Energy and Environmental Design) is part of an internationally recognized green building certification program. In compliance with the City of Bloomington Ordinance 09-04, the Switchyard Pavilion was built to LEED Silver standards. The Indiana Arborist Association (IAA) in partnership with the Indiana Society of Arboriculture (ISA) presented the City of Bloomington Parks and Recreation Department with the IAA Gold Leaf Award at the IAA's annual meeting in 2021 in recognition of Switchyard Park's extensive landscape plan.



Utilities building

## Dillman Modernization, Utilities- SAP Goal 8.2, reduce non-renewable energy use

Utilities designed and began construction of over \$23 million in modernization and capacity enhancements at the Dillman Wastewater Treatment Plan, to be completed in 2022. The \$23 million project includes a standalone disk filter addition, new switchgear, and new blowers. These, and other projects underway by Utilities, will help significantly to reduce electrical consumption at Dillman, Monroe County's largest single electricity consumer. It is anticipated that the electrical and aeration improvements could lead to a 15% reduction in electrical usage.



Aerial view of water treatment plant

## **CITY OPERATIONS**



### **Sustainability Action Plan Goals**

| SAP Goal 8.2  | Bloomington will reduce GHG emissions from municipal operations 12 percent by 2023, relative to a baseline of 33,702 metric tons of GHG emissions in 2015.                |  |  |
|---------------|---|--|--|
| SAP Goal 8.2  | Bloomington will reduce non-renewable energy use in City owned and operated facilities 12 percent by 2023, relative to a baseline usage of 155,282 MMBTUs in 2015.        |  |  |
| SAP Goal 8.3  | Bloomington will reduce non-renewable City fleet vehicle fuel use 5 percent by 2023, relative to a baseline usage of 40,540 MMBTUs in 2015.                               |  |  |
| SAP Goal 8.4  | Bloomington Transit will reduce non-renewable fuel use 5 percent by 2023, relative to a baseline usage of 31,417 MMBTUs in 2015.  |  |  |
| SAP Goal 8.5  | Bloomington will establish a water conservation goal by 2019.   |  |  |
| SAP Goal 8.6  | Bloomington will establish a baseline and waste diversion rate for applicable City facilities by 2020.  |  |  |
| SAP Goal 8.7  | Bloomington will review and revise the City Hall Sustainable Purchasing Policy, expand to other facilities and track compliance by 2021.                                  |  |  |
| SAP Goal 8.9  | Bloomington will decrease the percentage of employees commuting to work in single-occupancy vehicles to 80 percent by 2023, compared to a baseline of 82 percent in 2018. |  |  |
| SAP Goal 8.10 | Bloomington will eradicate all invasive plants from priority municipal building landscapes by 2023.   |  |  |

### **City Operations Other Progress**

| SAP Goal 8.2         | Energy tracking software for benchmarking, ESD   | In 2021, ESD set up third party software to monitor electricity and natural gas use facilities with the highest electricity and natural gas consumption to evaluate opportunities for efficiency improvements across operations. |
|----------------------|--|--|
| SAP Goal 8.3         | Lucidity Asset Management of<br>City fleet vehicles, Public Works                              | Full deployment of the Lucity asset management software has been delayed due to COVID-19, but will allow for more effective vehicle replacement prioritization.  |
| SAP Goal<br>8.3, 8.7 | Green fleet policy to prioritize procurement of hybrid or electric vehicles, Public Works, ESD | Two fully electric pool vehicles were purchased by Public Works through the Climate Mayor's Purchasing Collaborative in 2020. Further procurement decisions will be based on a green fleet policy in development with ESD.       |
| SAP Goal 8.3         | Fleet right sizing, Public Works   | The Fleet Division has identified the 20 most underutilized vehicles and re-assigned use of those vehicles for more efficient utilization.   |
| SAP Goal 8.3         | Hybrid Vehicle Purchasing, Fire  | Fire replaced a hybrid pool vehicle with an electric vehicle, as well as replacing most small gasoline engine equipment with electric alternatives and added passive cooling systems to reduce energy consumption.               |
| SAP Goal 8.10        | Parks Master Plan, Parks &<br>Recreation   | Master Plan was completed for Parks and Recreation that will guide Bloomington Parks and Recreation Department programs and priorities for the years 2021 through 2025.  |

## **CLIMATE CHANGE** & ADAPTATION





Climate Action Plan cover page

## Climate Action Plan, ESD- SAP Goal 1.2- Create a community climate adaptation plan

The first Bloomington Climate Action Plan (CAP) includes strategies and goals for climate change mitigation related to eight areas, including transportation and land use, energy and built environment, waste management, water and wastewater, food and agriculture, health and safety, greenspace and ecosystem health, and climate economy. The CAP was developed over the course of 15 months in collaboration with a 27-person planning team of community members, economic development representatives, City and Monroe County staff, together with input from a public survey and three community meetings. Hundreds of comments and recommendations were received from the public, many of which have been incorporated in the final version of the CAP. The strategic document was accepted unanimously by the Bloomington City Council in April 2021.



Climate Vulnerability Assessment cover page

## Climate Vulnerability Assessment, ESD- SAP Goal 1.2- Create a community climate adaptation plan

The Global Covenant of Mayors for Climate & Energy (GCoM) is the world's largest alliance of cities and local governments with a shared long-term vision of promoting and supporting voluntary action to combat climate change. Completion of the Climate Vulnerability Assessment in 2020 helped the City of Bloomington improve its adaptation efforts by identifying hazards and improving its adaptation planning process. Disclosure of a climate vulnerability assessment is required to maintain membership as part of this global alliance for city climate leadership.



EV charging stations at Switchyard Park

## CLIMATE CHANGE & ADAPTATION





2021 LEED v.4.1. certified



Carbon Disclosure Project "A" rating announcement

#### LEED for Cities, ESD- SAP Goal 1.1-Reduce community emissions

Bloomington received LEED for Cities v.4.1 certification in 2021. LEED, a certification by the U.S. Green Building Council, offers the City of Bloomington a framework to measure and track data related to energy, water, waste, transportation, education, health, safety, prosperity and equity across the community. The process to become a LEED-certified city took 18 months and Bloomington received financial assistance, educational resources and technical support to track and verify performance for a wide variety of sustainability indicators. With this announcement, Bloomington joins a global network of approximately 100 LEED-certified cities and communities. Staff presented the city's experience at the Greenbuild International Conference in 2021.

#### Carbon Disclosure Project, ESD- SAP Goal 1.1-Reduce community emissions

In 2019, Bloomington became one of only seven cities in the Midwest to receive an A score after disclosing with the Carbon Disclosure Project, along with Indianapolis, Evanston, Ann Arbor, Cleveland, Columbus (Ohio), and Cincinnati. Of the 850 cities that reported sustainability and climate data to the Carbon Disclosure Project, only 12% made it onto the 2019 A List. Bloomington was a new arrival at the A (Leadership) level, bringing its score up from a C (Awareness) level in 2018. In order to score an A, a city must have a city-wide emissions inventory, have set an emissions reduction target, have published a climate action plan and have completed a climate adaptation plan to demonstrate how it will tackle climate hazards now and in the future.

### **Sustainability Action Plan Goals**

| 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 2017. |  |
|--------------|--|--|
| SAP Goal 1.2 | Create a community climate adaptation plan by 2022.  |  |



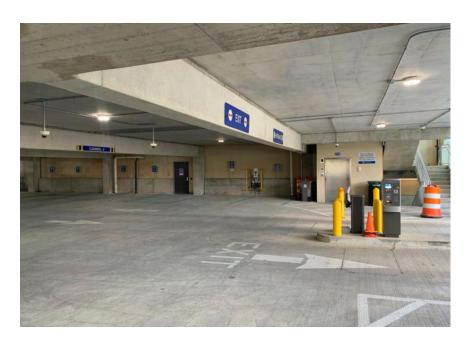


## Solar and Energy Efficiency Loan Program, ESD- CAP Goals EB 1, 2, 5- increase renewable energy, increase energy efficiency, increase financing options

The City of Bloomington is offering support for organizations to improve building efficiency through projects such as solar installation, appliance and lighting upgrades, and weatherization with the goals of reducing utility costs and saving energy. Through a partnership with CDFI Friendly Bloomington and the mission-driven lender IFF, the 2021 Solar and Energy Efficiency Loan (SEEL) Program is providing support through low-interest loans financed by IFF, grants from the City of Bloomington, and City-funded energy assessments. Funding is available to nonprofit organizations, schools and early childhood centers, libraries, medical facilities, and grocery stores within the city limits. Project costs are covered through a combination of low-interest loans, grants and the organization's own capital. The City of Bloomington is currently working with nine nonprofit organizations as part of the initial cohort. This project is funded as part of the Recover Forward initiative.

#### LED Conversion, Public Works- CAP Goal EB 2- increase energy efficiency

In 2021, the LED conversion project has converted 28 existing street lights to LED with an additional 34 street lights on Duke Energy's schedule to be converted by the end of Q3. Public Works was also able to reduce equipment costs by 37% over the expected service life of new LED resident-requested street lights this year. Public Works will continue to lower the City's carbon footprint and energy costs by converting high pressure sodium street lights to modern, low energy use Light Emitting Diode (LED) lighting fixtures to replace approximately 50 street lights by the end of Q3.



Other City LED Lighting Projects, LED lighting in Trades District Garage

## ENERGY & BUILT ENVIRONMENT





Bloomington Green Home Improvement Program logo

## Bloomington Green Home Improvement Program, ESD- CAP Goals EB 1, 2, 5- increase renewable energy, increase energy efficiency, increase financing options

The Bloomington Green Home Improvement Program (BGHIP) is a 2021 lending program to provide financing for homeowners to complete eligible energy efficiency, solar, and/ or geothermal upgrades to their homes. This program is a partnership between the City of Bloomington's Department of Economic and Sustainable Development, CDFI Friendly Bloomington and Clean Energy Credit Union. Program participants who verify project completion and have an annual household income of less than \$100,000 are also eligible for a \$1,000 rebate from the City. Additionally, a federal solar income tax credit of 26% is currently available for any solar or geothermal project completed in 2021 or 2022. This represents the first municipal green home lending partnership established with Clean Energy Credit Union to date.



New cooling tower for the HVAC upgrade at City Hall

## HVAC Replacement, Facilities- SAP Goal 2.1- reduce building energy use

To improve building operations and efficiency, major improvements to City Hall's HVAC system were completed in 2020, including the replacement of 33 heat pumps. The vendor supplied all necessary documents to upgrade City Hall's HVAC control system to remote access, monitoring and control. This same analysis is being completed for all other Facilities managed by the Department of Public Works.



Bloomington Transit solar panels

## ENERGY & BUILT ENVIRONMENT



### Sustainability Action Plan & Climate Action Plan Goals

| 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.                                |  |  |
|---------------|--|--|--|
| 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. |  |  |
| CAP Goal EB 1 | Increase distributed renewable energy to 250,000 MWH of total generation annually by 2030.   |  |  |
| CAP Goal EB 2 | Increase energy efficiency citywide 16% for electricity and 12% for natural gas of 2018 values.  |  |  |
| CAP Goal EB 3 | Bloomington will establish a water conservation goal by 2019.  |  |  |
| CAP Goal EB 4 | Bloomington will establish a baseline and waste diversion rate for applicable City facilities by 2020.   |  |  |
| CAP Goal EB 5 | Bloomington will review and revise the City Hall Sustainable Purchasing Policy, expand to other facilities and track compliance by 2021.                               |  |  |

### **Energy & Built Environment Other Progress**

| SAP Goal 2.1, 8.2<br>CAP Goal EB 2 | Public Works<br>Capital Facilities<br>Maintenance Plan                            | Facilities developed a long-range capital facility maintenance plan and initial budget estimate based upon the Overall Condition Index ratings.   |
|------------------------------------|---|---|
| SAP GOAL 1.1<br>CAP Goal EB 1      | ESD- SIREN solar information sessions   | Information sessions held monthly by Solarize volunteers in virtual format for 2020 and 2021. 17 solar installations were completed in 2021 by Whole Sun Designs through Solarize, the vendor will be MPI Solar for information sessions for the remainder of 2021. |
| SAP Goal 1.1<br>CAP Goal EB 1      | ESD- Bloomington Housing<br>Authority Solar Grant                                 | Bloomington Housing Authority Solar Grant- Bloomington Housing<br>Authority received a \$50,000 grant in 2021 from ESD to put solar on<br>the Walnut Woods facility through Recover Forward funds. The<br>installation is fully operational.                        |
| CAP Goal EB 2                      | ESD- Weatherization Grant to<br>South Central Community<br>Action Program (SCCAP) | SCCAP received a \$100,000 grant from ESD to increase the number of households eligible for weatherization services. Implementation of the grant is ongoing.  |
| SAP Goal 2.2                       | Engineering, ESD, OOTM,<br>Planning, HAND- Hospital<br>Redevelopment              | The City of Bloomington planning team is actively engaged in Master Planning and site redevelopment and will work to ensure that sustainability design standards established during the master planning process are met.  |

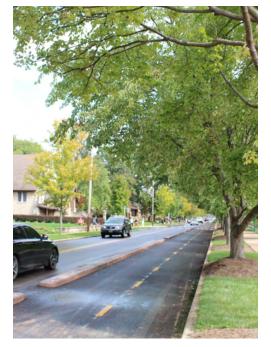




Bus stop improvement funded through Recover Forward

#### Bloomington Transit Bus Stop Accessibility Improvements, Bloomington Transit, Public Works- SAP Goal 3.6- increase use of Bloomington Transit

Public Works invested \$400,000 in mobility enhancements to sidewalks, paths, sidewalk ramps, and improvements to more than 27 Bloomington Transit bus stops. Accessibility improvements include, but are not limited to, expanding landing pads, new shelters, and new benches. Bus stop improvements were funded through the Recover Forward initiative to improve transit accessibility.



The 7-line near Dunn Meadow

## Construction of the 7-Line, Planning & Transportation, Engineering- SAP Goals Goals 3.2, 3.3- Multimodal Infrastructure

Building on the success and transformative effect of the B-Line Trail, the 7-Line will provide a protected east-west bicycle lane and improved bus corridor to connect the B-Line, downtown, Indiana University campus, and eastside neighborhoods. The project will enhance and expand the conventional bike lane that already exists along parts of 7th Street by adding physical separation between bicyclists and auto traffic to improve comfort, safety, and efficiency for all road users.



#### Multi-Use Paths, Planning & Transportation, Engineering-SAP Goals Goals 3.2, 3.3- Multimodal Infrastructure



Multi-use path construction on Henderson Street

#### **Multi-Use Paths**

- 17th (Monroe to Grant) Multi Use Path- The City is working on designing improvements to 17th Street, from Monroe Street to Grant Street, which will improve safety and accessibility for a mix of transportation options. The project involves changes along 17th Street including construction of a multi-use path along the north side of the street, construction of accessible sidewalk curb ramps, street resurfacing, and replacement of the existing traffic signal at the intersection of 17th Street at Madison Street/Kinser Pike. Design of the project is underway now and construction is expected to begin in mid to late 2022. The project is supported by federal funding as prioritized through the Bloomington Monroe County Metropolitan Planning Organization.
- **Discovery Parkway** Engineering will install a multi-use path on the north side of East Discovery Parkway, in addition to milling and resurfacing the roadway.
- Rogers (High to The Stands) Multi Use Path Project- Engineering will install an accessible, multi-use path on the north side of Rogers Road from High Street to The Stands Drive/Winding Brook Circle and provide an improved pedestrian crossing of Rogers Road at The Stands
- Henderson (Hillside to Winslow) Multi Use Path Project- This project will install a multi-use path on the east side of Henderson Street from Hillside Drive to approximately 650' north of Winslow Road (the continuation of this path to Winslow Road is being constructed as a part of another project, "Winslow-Henderson Path and Intersection Improvements.



Example greenway on Allen Street

#### Greenways

To create a connected network, the City is prioritizing the design and installation of Neighborhood Greenways recommended in the Priority Bicycle Facilities Network. For 2021, several Neighborhood Greenways are in the works. To design and install Neighborhood Greenways, the City follows the Staff-Led Traffic Calming/ Neighborhood Greenways Process.

- Ralston/Graham Neighborhood Greenway
- E 7th Neighborhood Greenway



## Sidewalk infrastructure construction, Public Works- SAP GOAL 3.4- Sidewalks- improve sidewalk infrastructure for improved walkability

The Public Works Streets Division received \$568,083 Community Crossings Matching Grant to facilitate the reconstruction of pedestrian crosswalks and repave East Kirkwood Ave from Walnut Street to Indiana Avenue. This project began 6 weeks early and was completed 10 weeks ahead of the original schedule. By the end of 2021, 6,000 feet of sidewalks will have been repaired as well as 100 new or upgraded Americans with Disabilities Act (ADA) accessible sidewalk ramps in Community Development Block Grant areas.

#### Other Sidewalks

- **S Walnut (Winslow to Ridgeview) Sidewalk-** this project will install a new sidewalk along the east side of South Walnut Street approximately 350 feet south of Winslow Road to approximately 230 feet south of Ridgeview Drive. This project has been prioritized by the 2021 City Council Sidewalk Committee in order to improve safety and accessibility for people walking in the area.
- West 6th Street and North Elm Street Sidewalk Replacement- As part of the Recover Forward initiative. Sidewalks will be replaced on West 6th Street from North Elm Street to North Fairview Street. In addition, the eastern sidewalk on North Elm Street from West 4th Street to West 5th Street will also be replaced.



Multi-Use Paths: Miller- Henderson Multi-Use Path



### Sustainability Action Plan & Climate Action Plan Goals

| SAP Goal 3.1  | Ensure five Urban Village Centers meet the criteria established in the Comprehensive Plan by 2023.   |  |  |
|---------------|--|--|--|
| 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). |  |  |
| SAP Goal 3.3  | Achieve bicycle and pedestrian fatality rates of zero by 2023.   |  |  |
| SAP Goal 3.4  | Achieve the Walk Friendly Communities Platinum level designation by 2022.  |  |  |
| SAP Goal 3.5  | Achieve the League of American Bicyclists Platinum Rating by 2022.   |  |  |
| 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.   |  |  |
| CAP Goal TL 1 | Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  |  |  |
| CAP Goal TL 2 | Support and encourage electric vehicle adoption, achieve 30% of vehicles sold and 15% of VMT community-wide by 2030.   |  |  |

### **Transportation Other Progress**

| CAP Goal TL 2 | Parksmart certification for 4th<br>Street and Trades Garages | The Trades District garage will be Parksmart certified and include bike lockers and parking, solar panels to provide the structure's electricity, and electric vehicle charging stations.   |
|---------------|--|---|
| CAP Goal TL 2 | VW Mitigation Grant Funding                                  | ESD applied for and received additional funding to offset the cost of two EV chargers in the Fourth Street and Trades Garage from the VW Mitigation Grant program administered by the Indiana Department of Environmental Management. |





Recycling bin with improved signage

## Recycling Education to Reduce Contamination, Public Works- SAP GOAL 5.1, CAP Goal WM 1- increase landfill diversion

Significant recent efforts to reduce recycling contamination have included monthly social media posts in coordination with the Office of the Mayor, mailing over 15,000 letters to all addresses that receive City sanitation services, and applying new informative graphic stickers that outline updated recycling collection and procedure information to the lid of each residential recycling cart. Sanitation staff will use the new Routeware software system's data to identify areas of the community that have higher levels of recycling contamination and target those for educational outreach. The Sanitation Division's recycling diversion rate is currently at 36%, with a goal of achieving a minimum of 40% recycling diversion rate by the end of Q4 to exceed the Environmental Protection Agency's recorded national diversion rate.



Earthkeepers compost drop-off station at Bryan Park

## Compost, Parks & Recreation- SAP Goal 5.1, Goal WM 1- increase landfill diversion

Parks Operations staff partnered with a third-party contractor, Earthkeepers, to add two community compost drop off sites at Switchyard and Bryan parks to increase access to community composting facilities. This adds to the network of drop-off sites available to subscribers which includes drop off sites at every Monroe County Solid Waste District site, as well.



Compost pile at Switchyard Park Community Gardens





1,000 Households Who Mulch Pilot Participant

## 1,000 Households Who Mulch- Office of the Mayor, Public Works- CAP Goal WM 2- Educate the public to achieve waste reduction

The citywide Innovation Team are working with Sanitation staff and residents on a pilot composting program. As part of the pilot, the Sanitation Division has hired Centerstone clients to work collaboratively with Sanitation staff to rake tree plots to improve efficiency in leaf collection. The 1,000 Households Who Mulch project is an expansion and iteration of a 22-household pilot completed in 2020 which challenged households to mulch and compost as much as possible and only put the excess leaves out for collection by the yard waste crew. The project is actively engaging hundreds of households and neighborhoods across Bloomington.



Woodlands neighborhood cleanup, 2021

#### Neighborhood Clean-Up, HAND- CAP Goal WM 2-Educate the public to achieve waste reduction

Housing and Neighborhood Development engaged in departmental outreach to lead annual neighborhood clean-ups. 6.39 tons of trash and metal materials were collected, along with 200 yards of brush waste.

#### Sustainability Action Plan & Climate Action Plan Goals

| SAP Goal 5.1  | Divert at least 40 percent of the volume of residential waste collected by City Sanitation from being landfilled by 2023. |  |  |
|---------------|---|--|--|
| CAP Goal WM 1 | Increase landfill solid waste diversion by 30% of 2018 values (26,500 tons of waste reduction).                           |  |  |
| CAP Goal WM 2 | Educate, motivate, and empower the public to achieve waste reduction and diversion.                                       |  |  |







Smart meter maintenance

## Integrated Smart Meter System Installation, Utilities- SAP Goal 6.1-Advanced Metering

In 2019, City Council approved a lease-purchase agreement to fund the implementation of the AMI system serving all CBU customers. An integrated system of smart meters, communications networks, and data management systems, AMI enables two-way communication between utilities and customers. The installed system provides a number of important functions that were not previously possible or had to be performed manually, including on-demand reading and the ability to measure water usage automatically and remotely, to connect and disconnect service, to detect tampering and to identify and isolate pressure issues and potential leaks. Both the utility and the customer now have access to more detailed water usage information with the new meters and make adjustments in their water use habits as needed to save money.



Hidden River Pathway Project logo

## Hidden River Pathway Project, Utilities- CAP Goal W 4- Mitigate Flood Hazards and Impacts

In February 2021, Utilities began the Hidden River Pathway Project, a two year reconstruction project of downtown stormwater infrastructure, to prevent flooding during rain events. CBU and its contractor will be reconstructing 1,829 feet of culverts, along with some sanitary sewers and water mains to support Bloomington's vibrant downtown. The current culverts will be replaced with 5'x20'-24' four-sided concrete box culverts at more consistent slopes to help move water effectively (improve hydraulic efficiency). The new design also moves the water out from under four buildings (two residential and two commercial) that were built over sections of the existing infrastructure.



Jordan River Project







Rain garden on Olive St.

## CAP Goal Goal W 4- Increase Green Stormwater Infrastructure Features Stormwater Utilities utilized revenue from utility fees to inve

Green Infrastructure Fund projects, Utilities- SAP Goal 6.4,

Stormwater Utilities utilized revenue from utility fees to invest \$400,000 in green stormwater infrastructure in 2020. In 2019, CBU established this Green Infrastructure fund as part of the monthly stormwater fee. CBU invests these funds to develop and maintain "green" stormwater infrastructure upgrades in City projects. Green infrastructure elements -- such as rain gardens, bioswales, and permeable paving -- slow down stormwater flow and reduce the intensity of peak flows and flooding downstream. The Utilities Stormwater Plan will inform the location of future stormwater infrastructure projects and will be completed in 2021, based on input from major stakeholders within the City and in the private sector, to incorporate both gray and green infrastructure to make our City more sustainable and resilient to changing climate.



Utilities storm drain art education group photo, Lotus Festival 2017

## Stormwater Education & Outreach Program, Utilities- SAP Goal 6.4- Increase Green Infrastructure Features

City of Bloomington Utilities received an award from the Indiana Association for Floodplain Stormwater Management in 2021 for Outstanding Education and Outreach program, project, or specialist promoting the advancement of education regarding floodplain and/or stormwater management. In addition to continuing education for the community, Utilities also offers a Residential Stormwater Grant program. In 2021, \$75,000 was awarded as part of the Stormwater Grant Program, to encourage and facilitate stormwater improvement projects on private property that help to solve neighborhood-scale stormwater issues. On June 2, 2021, the Review Committee selected 12 projects totaling \$70,006.22 for approval by the Utilities Service Board.



Storm drain art at Bloomington Pride Fest, 2021





### Sustainability Action Plan & Climate Action Plan Goals

| SAP Goal 6.1 | Reduce Per Capita Daily Water Consumption 20 percent by 2023, relative to a baseline of 96.2 gallons in 2016.                                 |  |  |
|--------------|---|--|--|
| SAP Goal 6.2 | Participate in at least two partnerships designed to improve surface water quality in Monroe<br>County by 2023.                               |  |  |
| SAP Goal 6.3 | Expand participation in City-led surface water quality programs, compared to a 2019 baseline.   |  |  |
| SAP Goal 6.4 | Increase the number of green infrastructure features in the Bloomington community to improve stormwater quality, compared to a 2019 baseline. |  |  |
| SAP Goal 6.5 | Decrease the number of impaired water bodies in Monroe County by 2023, compared to a baseline number of 21 in 2018.                           |  |  |
| SAP Goal 6.6 | Eliminate all chronic sewer overflow locations, up to a certain magnitude storm event (exact metr<br>to be determined by CBU staff).          |  |  |
| CAP Goal W 1 | Decrease potable water consumption by 3% of 2018 values.  |  |  |
| CAP Goal W 2 | Maintain source and drinking water quality through climate related challenges.  |  |  |
| CAP Goal W 3 | Reduce energy use associated with treating and transporting water and wastewater by 10% of 2018 values.                                       |  |  |
| CAP Goal W 4 | Mitigate flood hazards and impacts.   |  |  |

### **Water Other Progress**

| CAP Goal W2 | Improve water quality protections and awareness | Utilities supporting Monroe Lake water quality study effort with USGS, the Conservation Law Center at IU, the Lake Monroe Watershed Coalition, and the Friends of Lake Monroe, to be completed by 2023 |
|-------------|---|--|
| CAP Goal W2 | Improve water quality protections and awareness | Utilities provided technical assistance as a member of the steering committee for the Lake Monroe Water Fund.  |

## LOCAL FOOD & AGRICULTURE





Interior of Rose Hill Farm Stop

## Rose Hill Farm Stop, ESD- SAP GOAL 4.3, CAP Goal FA 3-Increase and Stabilize Local Food Market

The Rose Hill Farm Stop, opened in 2021, received grant funding through the Recover Forward initiative. The store, based on the Argus Farm stop model from Ann Arbor, serves to improve regional security in case of industrial distribution disruptions. The store serves as a consignment-based sales outlet and is owned by a farmer cooperative and operates every day of the week. It will build on the online local food marketplace to develop a virtual aggregation entity connecting farms and institutional food buyers and prepare growers to meet institutional purchasing requirements. The Farm Stop is now open and serves as a new cooperative of small, local farmers operating a retail and aggregation outlet to connect the Bloomington community with transparently sourced, healthful food.

#### Community Gardens, Parks- SAP GOAL 4.2-Increase Area of Food Gardens

Parks provided gardening opportunities for community members by renting 100% (241 plots) of all available garden beds at Willie Streeter Gardens, Rev. Butler Gardens, and Switchyard Park in 2021.



Switchyard Park community garden plots





#### Banneker Nutrition Hub Grant, Parks- CAP Goal FA 1-Increase Food and Nutrition Security

Bloomington Parks and Recreation Department's Banneker Community Center received a grant to develop a "Nutrition Hub," defined by the National Recreation and Park Association (NRPA) as "a trusted gathering place that provides access to affordable healthy foods and essential nutrition supports and services that reduce food insecurity, strengthen healthy foods decision making, and improve health outcomes". The NRPA, in cooperation with the Walmart Foundation, awarded the Banneker Community Center an \$80,000 "Parks as Community Nutrition Hubs: Expanding Access to Healthy Food" grant in May 2021. Banneker staff will collaborate with other food agencies in the community to expand nutrition services, provide access to affordable, healthy food, and reduce food insecurity. The Banneker Community Center has served as an Indiana Summer Food Service Program site for more than 15 years.

#### Sustainability Action Plan & Climate Action Plan Goals

| 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       |  |  |
|---------------|--|--|--|
| SAP Goal 4.2  | Increase the area of food gardens within the community, compared to a 2019 baseline  |  |  |
| 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. |  |  |
| CAP Goal FA 1 | Increase food and nutrition security citywide.   |  |  |
| CAP Goal FA 2 | Increase local agricultural resilience to climate shocks.  |  |  |
| CAP Goal FA 3 | Increase and stabilize the local food market.  |  |  |

#### **Local Food & Agriculture Other Progress**

| CAP Goal FA 1  Bloomington Community Farmers Market | Continued operation of Farmers Market during pandemic, including switching to an online Farmers Market platform to facilitate safety measures. |
|---|--|
|---|--|

## GREENSPACE & ECOSYSTEM HEALTH





Native Plants at City Hall

#### Native Landscaping, Parks- CAP Goal G 2-Increase climate adaptive habitats

Over 5,000 native plants were installed in 2020 across Bloomington, including locations such as Miller-Showers Park, WHB Park, AJB, Mills Pool, TLSP, Southeast Park and West 3rd Street medians. Additional native plant installation along the B-line Trail has been delayed by the Trades District parking garage construction. Other native plantings included over 3,000 native plant plugs and 10 pounds of native seed installed in the southwest quadrant of Mill Showers Park, as well as numerous invasive plant treatments that have occurred on the entire property. So far in 2021, Parks Landscaping Division planted 2,728 native plants (40 species) at 13 locations, including: Allison Jukebox, Banneker Center, Cascades Golf Course, City Hall, Courthouse Square, Fire Headquarters, Goat Farm, Olcott Park, Parks Operations Center, People's Park, Rose Hill Cemetery, West 3rd Street planters, and WHB Park.



Landscaping at Switchyard Park

## Invasive Plant Management, Parks- SAP GOAL 7.2-Remove invasive species

The Parks & Recreation Department manages over 2,000 acres of city properties, which includes removing invasives present across publicly owned lands. In 2018, to address this problem, Parks & Recreation compiled a vegetation report, which laid out all invasive species currently tracked within the parks system; including asian bush honeysuckle, garlic mustard, Japanese stiltgrass, among others. The management plan lays out a variety of methods of control to be administered city wide. As part of the invasive management, Parks will remove 50 acres of invasive woody vegetation (B-Line Trail, Bryan Park, Upper and Lower Cascades Park, Griffy Lake Nature Preserve, Leonard Springs Nature Park, Olcott Park, Southeast Park) by the end of 2021.



Greenspace at Leonard Springs Nature Park

## GREENSPACE & ECOSYSTEM HEALTH





Urban Forestry at Bryan Park

#### **Urban Forestry, Parks- CAP Goal Goal G 3-Increase Citywide Tree Canopy**

A recent inventory of the City of Bloomington's public tree population reveals significant increases in the number, health, and diversity of our trees along City streets, in rights-of-way, and within public parks. Urban Forestry has continued to add to the public tree canopy by planting 6,045 native trees and shrubs at 16 locations in 2020. Last year 134 trees were identified as hazardous and were removed. Of these 134 trees, 58 of these were reported to staff as an emergency removal and responded to within one hour of the notification. As of mid 2021, the Parks Urban Forestry Division planted 5,843 native trees at five locations: Ferguson Dog Park, Goat Farm, Park Ridge East Park, Schmalz Farm Park, Southeast Park/ Renwick Trail.

#### Sustainability Action Plan & Climate Action Plan Goals

| SAP Goal 7.1 | Conserve greenspace and enhance 100 acres of habitat in priority areas surrounding Clear Creek,<br>Griffy Lake, and Jackson Creek by 2023. |
|--------------|--|
| SAP Goal 7.2 | Remove 100 acres of invasive plants on public lands and 100 acres on private lands by 2023.  |
| CAP Goal G 1 | Increase the quantity and quality of greenspace within the community.  |
| CAP Goal G 2 | Increase the quantity and quality of climate adaptive native habitats.   |
| CAP Goal G 3 | Increase citywide tree canopy coverage by 3% of 2018 values.   |
| CAP Goal G 4 | Reduce stormwater and micro heat island impacts.   |

## **CLIMATE ECONOMY**

### **HEALTH & SAFETY**

### **Climate Economy Goals**

| CAP Goal CE 1 | Build marketplace climate resilience.   |
|---------------|---|
| CAP Goal CE 2 | Attract, create, and support businesses that are committed to sustainability and climate goals. |
| CAP Goal CE 3 | Develop new mechanisms for financing City climate action plan implementation.                   |

### **Health & Safety Goals**

| CAP Goal HS 1 | Educate, engage, and empower the public for climate health and safety. |
|---------------|--|
| CAP Goal HS 2 | Prepare Bloomington for climate risks and impacts.                     |
| CAP Goal HS 3 | Respond to climate risks and impacts.                                  |



Downtown Bloomington businesses respond to COVID-19 pandemic by providing outdoor dining options

## **APPENDIX**

Table 1: All Sustainability and Climate Action Plan Goals, Strategies, and Actions

| Cotosses        |      | and Climate Action Plan Goals, Strategies and Actions  | Ctuet    | A -4!   | Antina Description  | Veer/ Di  |
|-----------------|------|--|----------|---------|---|-----------|
| Category        | Plan | Goal   | Strategy | Action  | Action Description  | Year/ Pha |
| City Operations |      |  |          |         |   |           |
| 2018 Goals      |      | COMPAGE THE CIT OF PROPERTY OF THE COMPAGE |          |         |   |           |
| City Operations | SAP  | GOAL 8.8: The City of Bloomington will use sustainable building and green infrastructure practices at all applicable City facilities   |          | 8.8.a.  | Develop an inventory of sustainable building projects implemented at City facilities since 2009   | 2018      |
| City Operations | SAP  | GOAL 8.11: The City of Bloomington will develop an<br>employee education plan to facilitate implementation of the<br>Sustainability Action Plan by June 2019   |          | 8.11.a. | Develop a clear framework for Team Green and solicit members from all departments   | 2018      |
| 2019 Goals      |      |  |          |         |   |           |
| City Operations | SAP  | GOAL 8.1: The City of Bloomington will reduce GHG emissions from municipal operations 12 percent by 2023, relative to a baseline of 33,702 metric tons of GHG emissions in 2015  |          | 8.1.a.  | Select a consistent methodology and reporting process for GHG emissions inventories and develop an updated Greenhouse Gas Emissions Inventory for City operations every two years | 2019      |
| City Operations | SAP  | GOAL 8.1: The City of Bloomington will reduce GHG emissions from municipal operations 12 percent by 2023, relative to a baseline of 33,702 metric tons of GHG emissions in 2015  |          | 8.1.b.  | Evaluate the viability of creating a renewable energy goal for City operations  | 2019      |
| City Operations | SAP  | GOAL 8.2: The City of Bloomington will reduce non-<br>renewable energy use in City owned and operated facilities<br>12 percent by 2023, relative to a baseline usage of<br>155,282 MMBTUs in 2015  |          | 8.2.a.  | Establish a consistent methodology and process for monthly reporting of individual building energy usage and cost data  | 2019      |
| City Operations | SAP  | GOAL 8.2: The City of Bloomington will reduce non-<br>renewable energy use in City owned and operated facilities<br>12 percent by 2023, relative to a baseline usage of<br>155,282 MMBTUs in 2015  |          | 8.2.b.  | Develop an implementation plan to achieve energy use reductions outlined for this goal  | 2019      |
| City Operations | SAP  | GOAL 8.3: The City of Bloomington will reduce non-<br>renewable City fleet vehicle fuel use 5 percent by 2023,<br>relative to a baseline usage of 40,540 MMBTUs in 2015  |          | 8.3.a.  | Establish consistent methodology and process for monthly reporting of fleet fuel usage and cost data  | 2019      |
| City Operations | SAP  | GOAL 8.5: The City of Bloomington will establish a water conservation goal by 2019   |          | 8.5.a.  | Establish 2018 water use baseline for all City facilities   | 2019      |
| City Operations | SAP  | GOAL 8.5: The City of Bloomington will establish a water conservation goal by 2020   |          | 8.5.b.  | Develop a quarterly reporting system for water use in all City facilities   | 2019      |
| City Operations | SAP  | GOAL 8.5: The City of Bloomington will establish a water conservation goal by 2021   |          | 8.5.c.  | Develop a mechanism through UReport to allow citizens and employees to report water leaks in government buildings   | 2019      |
| City Operations | SAP  | GOAL 8.6: The City of Bloomington will establish a baseline and waste diversion rate for applicable City facilities by 2020  |          | 8.6.a.  | Conduct waste audits for all applicable, occupied City facilities   | 2019      |
| City Operations | SAP  | GOAL 8.6: The City of Bloomington will establish a baseline and waste diversion rate for applicable City facilities by 2020  |          | 8.6.b.  | Establish a consistent methodology and process for quarterly reporting of waste generation and diversion rates in City facilities   | 2019      |
| City Operations | SAP  | GOAL 8.6: The City of Bloomington will establish a baseline and waste diversion rate for applicable City facilities by 2020  |          | 8.6.c.  | If the City Hall pilot succeeds, expand composting opportunities to at least two additional City facilities   | 2019      |
| City Operations | SAP  | GOAL 8.7: The City of Bloomington will review and revise the City Hall Sustainable Purchasing Policy, expand to other facilities and track compliance by 2021  |          | 8.7.a.  | Establish annual reporting process for Sustainable Purchasing Policy (SPP) compliance through City of Bloomington Data Portal   | 2019      |
| City Operations | SAP  | GOAL 8.11: The City of Bloomington will develop an employee education plan to facilitate implementation of the Sustainability Action Plan by June 2020   |          | 8.11.b. | Hold monthly Team Green meetings to facilitate implementation of employee education plan  | 2019      |
| City Operations | SAP  | GOAL 8.11: The City of Bloomington will develop an employee education plan to facilitate implementation of the Sustainability Action Plan by June 2021   |          | 8.11.c. | Develop employee education and training opportunities related to each element of the SAP, with an annual schedule of activities, events, and key messaging                        | 2019      |
| City Operations | SAP  | GOAL 8.11: The City of Bloomington will develop an employee education plan to facilitate implementation of the Sustainability Action Plan by June 2022   |          | 8.11.d. | Offer trainings on social equity, diversity, and inclusion for all City staff   | 2019      |
| 2020 Goals      |      |  |          |         |   |           |
| City Operations | SAP  | GOAL 8.3: The City of Bloomington will reduce non-<br>renewable City fleet vehicle fuel use 5 percent by 2023,<br>relative to a baseline usage of 40,540 MMBTUs in 2015  |          | 8.3.b.  | Conduct analysis of fleet to right-size vehicles and fleet size; identify near-term opportunities for fuel-<br>efficient and lower-emission vehicle replacements                  | 2020      |
| City Operations | SAP  | GOAL 8.3: The City of Bloomington will reduce non-<br>renewable City fleet vehicle fuel use 5 percent by 2023,<br>relative to a baseline usage of 40,540 MMBTUs in 2015  |          | 8.3.c.  | Develop and implement a policy to maximize fuel efficiency by vehicle type, eliminate unnecessary vehicles and usage, and prioritize electric and hybrid vehicles                 | 2020      |
| City Operations | SAP  | GOAL 8.6: The City of Bloomington will establish a baseline and waste diversion rate for applicable City facilities by 2020  |          | 8.6.d.  | Identify additional opportunities for recycling at City facilities  | 2020      |

| Category        | Plan | Goal   | Strategy | Action  | Action Description  | Year/ Pha |
|-----------------|------|--|----------|---------|---|-----------|
| City Operations | SAP  | GOAL 8.8: The City of Bloomington will use sustainable building and green infrastructure practices at all applicable City facilities   |          | 8.8.g.  | Complete at least one Living Building Challenge petal certification project   | 2023      |
| City Operations | SAP  | GOAL 8.8: The City of Bloomington will use sustainable building and green infrastructure practices at all applicable City facilities   |          | 8.8.f.  | Create and implement a Green Infrastructure Plan for City government buildings  | 2023      |
| City Operations | SAP  | GOAL 8.4: Bloomington Transit will reduce non-renewable fuel use 5 percent by 2023, relative to a baseline usage of 31,417 MMBTUs in 2015  |          | 8.4.a.  | Begin testing alternative fuel/electric buses; make recommendations for changes to fleet to reduce fuel use and associated emissions  | 2023      |
| City Operations | SAP  | GOAL 8.2: The City of Bloomington will reduce non-<br>renewable energy use in City owned and operated facilities<br>12 percent by 2023, relative to a baseline usage of<br>155,282 MMBTUs in 2017        |          | 8.2.d.  | Identify and implement air process upgrades, improving energy wastewater treatment plant efficiency   | 202       |
| City Operations | SAP  | GOAL 8.2: The City of Bloomington will reduce non-<br>renewable energy use in City owned and operated facilities<br>12 percent by 2023, relative to a baseline usage of<br>155,282 MMBTUs in 2016        |          | 8.2.c.  | Achieve an ENERGY STAR score of 75 or better for all eligible City buildings  | 202       |
| 2023 Goals      |      |  |          |         |   |           |
| City Operations | SAP  | GOAL 8.11: The City of Bloomington will develop an employee education plan to facilitate implementation of the Sustainability Action Plan by June 2023   |          | 8.11.e. | Evaluate the potential to create a funding mechanism for employee-led sustainability projects at City facilities  | 202       |
| City Operations | SAP  | GOAL 8.10: The City of Bloomington will eradicate all invasive plants from priority municipal building landscapes by 2023  |          | 8.10.b. | Replace invasive plants with native species at prioritized City facilities and properties   | 202       |
| City Operations | SAP  | GOAL 8.8: The City of Bloomington will use sustainable building and green infrastructure practices at all applicable City facilities   |          | 8.8.e.  | Inventory all City properties to determine the need for and appropriate siting of green infrastructure elements   | 202       |
| ity Operations  | SAP  | GOAL 8.5: The City of Bloomington will establish a water conservation goal by 2022   |          | 8.5.d.  | Complete water audits of all City facilities and make recommendations for indoor and outdoor water conservation measures  | 202       |
| ity Operations  | SAP  | GOAL 8.1: The City of Bloomington will reduce GHG<br>emissions from municipal operations 12 percent by 2023,<br>relative to a baseline of 33,702 metric tons of GHG<br>emissions in 2016                 |          | 8.1.c.  | Identify locations for future renewable energy installations at City-owned properties   | 202       |
| 2021 Goals      |      |  |          |         |   |           |
| City Operations | SAP  | GOAL 8.10: The City of Bloomington will eradicate all invasive plants from priority municipal building landscapes by 2023  |          | 8.10.a. | Develop an inventory of invasive plants for removal at all prioritized City facilities and properties   | 202       |
| City Operations | SAP  | GOAL 8.9: The City of Bloomington will decrease the<br>percentage of employees commuting to work in single-<br>occupancy vehicles to 80 percent by 2023, compared to a<br>baseline of 82 percent in 2018 |          | 8.9.b.  | Review and improve commuter benefits for non single-occupant vehicle modes of commuting (i.e., not driving alone)   | 202       |
| City Operations | SAP  | GOAL 8.9: The City of Bloomington will decrease the<br>percentage of employees commuting to work in single-<br>occupancy vehicles to 80 percent by 2023, compared to a<br>baseline of 82 percent in 2018 |          | 8.9.a.  | Establish an employee commuter program to decrease use of single-occupancy vehicles for employee travel to and from work  | 202       |
| City Operations | SAP  | GOAL 8.8: The City of Bloomington will use sustainable building and green infrastructure practices at all applicable City facilities   |          | 8.8.d.  | Adopt and implement policy to plant low-mow lawns and low-maintenance native trees with high capacity for carbon dioxide absorption, and restore native habitats on City properties to sequester carbon dioxide emissions | 202       |
| City Operations | SAP  | GOAL 8.8: The City of Bloomington will use sustainable building and green infrastructure practices at all applicable City facilities   |          | 8.8.c.  | Develop an inventory of green infrastructure elements on city properties and a mechanism for annual reporting on the Green Spots or other relevant website  | 202       |
| City Operations | SAP  | GOAL 8.8: The City of Bloomington will use sustainable building and green infrastructure practices at all applicable City facilities   |          | 8.8.b.  | Develop a mechanism for tracking the review of all Green Building Program Ordinance eligible projects pre- and post-implementation  | 202       |
| City Operations | SAP  | GOAL 8.7: The City of Bloomington will review and revise the City Hall Sustainable Purchasing Policy, expand to other facilities and track compliance by 2021  |          | 8.7.d.  | Develop and implement a plan to communicate SPP requirements to City employees at all facilities  | 202       |
| City Operations | SAP  | GOAL 8.7: The City of Bloomington will review and revise the City Hall Sustainable Purchasing Policy, expand to other facilities and track compliance by 2021  |          | 8.7.c.  | Develop a list of standard recommended consumable products for compliance with the SPP  | 202       |
| ity Operations  |      | the City Hall Sustainable Purchasing Policy, expand to other facilities and track compliance by 2021   |          | 8.7.b.  | Establish 2019 baseline for compliance with existing SSP  | 202       |

| Climate   |                   |  |          |                                      |   |                                      |
|---|-------------------|--|----------|--------------------------------------|---|--------------------------------------|
| Change &<br>Adaptation  | SAP               | GOAL 1.1: Reduce community GHG emissions 11 percent<br>by 2023, relative to a baseline of 1.3 million metric tons of<br>GHG emissions in 2016  |          | 1.1.a.                               | Establish a consistent methodology for measuring and reporting community GHG emissions  | 2019                                 |
| Climate<br>Change &<br>Adaptation   | SAP               | GOAL 1.1: Reduce community GHG emissions 11 percent<br>by 2023, relative to a baseline of 1.3 million metric tons of<br>GHG emissions in 2017  |          | 1.1.b.                               | Evaluate the viability of creating a community renewable energy goal  | 2019                                 |
| Climate<br>Change &<br>Adaptation   | SAP               | GOAL 1.1: Reduce community GHG emissions 11 percent<br>by 2023, relative to a baseline of 1.3 million metric tons of<br>GHG emissions in 2018  |          | 1.1.c.                               | Implement Solarize Bloomington with the Solar Indiana Renewable Energy Network (SIREN) to aid residential low cost solar installations  | 2019                                 |
| Climate<br>Change &<br>Adaptation   | SAP               | GOAL 1.1: Reduce community GHG emissions 11 percent<br>by 2023, relative to a baseline of 1.3 million metric tons of<br>GHG emissions in 2019  |          | 1.1.d.                               | Achieve designation as a SolSmart community by taking steps to streamline development requirements and encourage local solar markets  | 2019                                 |
| Climate<br>Change &<br>Adaptation   | SAP               | GOAL 1.1: Reduce community GHG emissions 11 percent<br>by 2023, relative to a baseline of 1.3 million metric tons of<br>GHG emissions in 2020  |          | 1.1.e.                               | Educate the public about the Monroe County Solar for All campaign and geothermal installations  | 2019                                 |
| 2020 Goals  |                   |  |          |                                      |   |                                      |
| Climate<br>Change &<br>Adaptation   | SAP               | GOAL 1.1: Reduce community GHG emissions 11 percent<br>by 2023, relative to a baseline of 1.3 million metric tons of<br>GHG emissions in 2021  |          | 1.1.f.                               | Investigate the feasibility of becoming a Green Power Community to encourage businesses, institutions, and individuals to collectively use more clean power   | 2020                                 |
| Climate<br>Change &<br>Adaptation   | SAP               | GOAL 1.1: Reduce community GHG emissions 11 percent<br>by 2023, relative to a baseline of 1.3 million metric tons of<br>GHG emissions in 2022  |          | 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   | 2020                                 |
| Climate<br>Change &<br>Adaptation   | SAP               | GOAL 1.1: Reduce community GHG emissions 11 percent<br>by 2023, relative to a baseline of 1.3 million metric tons of<br>GHG emissions in 2023  |          | 1.1.h.                               | Engage local businesses to reduce GHG emissions through outreach, education, and advisory services  | 2020                                 |
| Climate<br>Change &<br>Adaptation   | SAP               | GOAL 1.2: Create a community climate adaptation plan by 2022   |          | 1.2.a.                               | Conduct a climate vulnerability assessment  | 2020                                 |
| Category  | Plan              | Goal   | Strategy | Action                               | Action Description  | Year/ Phase                          |
| Energy & Built E  | nvironmer         | nt   |          |                                      | •   |                                      |
| 2019 Goals  |                   |  |          |                                      |   |                                      |
| Energy & Built<br>Environment   | 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   |          | 2.1.a.                               | Develop and implement an annual work plan for the Monroe County Energy Challenge (MCEC) to improve residential and commercial energy efficiency   | 2019                                 |
| Energy & Built<br>Environment   | SAP               | GOAL 2.2: Increase the percentage of residential and   |          |                                      | Update the Sustainable Development Incentive program and develop a mechanism to track utilization of  |                                      |
|   |                   | commercial buildings using sustainable building certification programs and incentives by 2023, relative to a 2019 baseline   |          | 2.2.a.                               | the program and post data to BClear   | 2019                                 |
| Energy & Built<br>Environment   | SAP               | certification programs and incentives by 2023, relative to a   |          | 2.2.a.<br>2.2.b.                     | the program and post data to BClear  Develop an educational program on sustainable building certifications and incentive programs in collaboration with the business community  | 2019                                 |
|   | SAP               | certification programs and incentives by 2023, relative to a 2019 baseline  GOAL 2.2: Increase the percentage of residential and commercial buildings using sustainable building certification programs and incentives by 2023, relative to a  |          |                                      | Develop an educational program on sustainable building certifications and incentive programs in   |                                      |
| Environment   | SAP               | certification programs and incentives by 2023, relative to a 2019 baseline  GOAL 2.2: Increase the percentage of residential and commercial buildings using sustainable building certification programs and incentives by 2023, relative to a  |          |                                      | Develop an educational program on sustainable building certifications and incentive programs in   |                                      |
| 2020 Goals Energy & Built   |                   | certification programs and incentives by 2023, relative to a 2019 baseline  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  GOAL 2.1: Reduce building energy use in the Bloomington community 20 percent by 2023, relative to a baseline  |          | 2.2.b.                               | Develop an educational program on sustainable building certifications and incentive programs in collaboration with the business community   | 2019                                 |
| 2020 Goals Energy & Built Environment Energy & Built  | SAP               | certification programs and incentives by 2023, relative to a 2019 baseline  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  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  GOAL 2.1: Reduce building energy use in the Bloomington community 20 percent by 2023, relative to a baseline community 20 percent by 2023, relative to a baseline   |          | 2.2.b.<br>2.1.b.                     | Develop an educational program on sustainable building certifications and incentive programs in collaboration with the business community  Establish a consistent methodology to monitor and report community-wide energy use  Collaborate with the business community on a voluntary program to disclose energy usage and costs, to  | 2019                                 |
| Environment  2020 Goals  Energy & Built Environment  Energy & Built Environment  Energy & Built Environment   | SAP               | certification programs and incentives by 2023, relative to a 2019 baseline  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  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  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  GOAL 2.2: Increase the percentage of residential and commercial buildings using sustainable building certification programs and incentives by 2023, relative to a   |          | 2.2.b.<br>2.1.b.<br>2.1.c.           | Develop an educational program on sustainable building certifications and incentive programs in collaboration with the business community  Establish a consistent methodology to monitor and report community-wide energy use  Collaborate with the business community on a voluntary program to disclose energy usage and costs, to help drive future energy savings   | 2019                                 |
| Environment  2020 Goals  Energy & Built Environment  Energy & Built Environment  Energy & Built Environment  Energy & Built Environment   | SAP<br>SAP<br>SAP | certification programs and incentives by 2023, relative to a 2019 baseline  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  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  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  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  GOAL 2.2: Increase the percentage of residential and commercial buildings using sustainable building certification programs and incentives by 2023, relative to a  |          | 2.2.b.<br>2.1.b.<br>2.1.c.<br>2.2.c. | Develop an educational program on sustainable building certifications and incentive programs in collaboration with the business community  Establish a consistent methodology to monitor and report community-wide energy use  Collaborate with the business community on a voluntary program to disclose energy usage and costs, to help drive future energy savings  Evaluate the development of a SMART goal for increasing the use of sustainable building certification program, per the development of a 2019 baseline  Develop a list of sustainable building projects to establish a baseline for 2019, and a mechanism for                                   | 2019<br>2020<br>2020<br>2020         |
| Environment  2020 Goals  Energy & Built Environment  Energy & Built Environment | SAP SAP SAP       | certification programs and incentives by 2023, relative to a 2019 baseline  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  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  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  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  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  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 |          | 2.2.b. 2.1.b. 2.1.c. 2.2.c.          | Develop an educational program on sustainable building certifications and incentive programs in collaboration with the business community  Establish a consistent methodology to monitor and report community-wide energy use  Collaborate with the business community on a voluntary program to disclose energy usage and costs, to help drive future energy savings  Evaluate the development of a SMART goal for increasing the use of sustainable building certification program, per the development of a 2019 baseline  Develop a list of sustainable building projects to establish a baseline for 2019, and a mechanism for tracking this data moving forward | 2019<br>2020<br>2020<br>2020<br>2020 |

|                               |      |   |  |         | ,  |      |
|-------------------------------|------|---|--|---------|--|------|
| Energy & Built<br>Environment | 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 |  | 2.2.f.  | Complete at least one Living Building Challenge petal certification project  | 2021 |
| Energy & Built<br>Environment | 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 |  | 2.2.g.  | Host an annual green home show to showcase sustainable building features and programs  | 2021 |
| 2022 Goals                    |      |   |  |         |  |      |
| Energy & Built<br>Environment | 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                                |  | 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  | 2022 |
| 2023 Goals                    |      |   |  |         |  |      |
| Energy & Built<br>Environment | 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                                |  | 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  | 2023 |
| Phase 1 (2021-20              | )23) |   |  |         |  |      |
| Energy & Built<br>Environment | 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.  | 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 off site options).  | 1    |
| Energy & Built<br>Environment | 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.  | 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  | 1    |
| Energy & Built<br>Environment | CAP  | Goal EB 1 Increase distributed renewable energy to 250,000 MWH of total generation annually by 2030.  | Strategy EB 1-B: Support and accelerate installation of on-site solar PV to 250,000 MWH of total generation citywide annually by 2030.       | 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. | 1    |
| Energy & Built<br>Environment | CAP  | Goal EB 1 Increase distributed renewable energy to 250,000 MWH of total generation annually by 2030.  | Strategy EB 1-B: Support and accelerate installation of on-site solar PV to 250,000 MWH of total generation citywide annually by 2030.       | 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 longrange goals.  | 1    |
| Energy & Built<br>Environment | CAP  | Goal EB 1 Increase distributed renewable energy to 250,000 MWH of total generation annually by 2030.  | Strategy EB 1-B: Support and accelerate installation of on-site solar PV to 250,000 MWH of total generation citywide annually by 2030.       | 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.   | 1    |
| Energy & Built<br>Environment | CAP  | Goal EB 1 Increase distributed renewable energy to 250,000 MWH of total generation annually by 2030.  | Strategy EB 1-B: Support and accelerate installation of on-site solar PV to 250,000 MWH of total generation citywide annually by 2030.       | 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.   | 1    |
| Energy & Built                | CAP  | Goal EB 1 Increase distributed renewable energy to  | Strategy EB 1-C: Improve energy policy   | EB1-C-1 | Streamline and offer expedited permitting for renewable energy installations.  | 1    |
| Energy & Built<br>Environment | CAP  | 250,000 MWH of total generation annually by 2030.  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. | 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  | 1    |
| Energy & Built<br>Environment | 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. | 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.   | 1    |
| Energy & Built<br>Environment | 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. | 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.   | 1    |
| Energy & Built<br>Environment | 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. | 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  | 1    |
| Energy & Built<br>Environment | CAP  | Goal EB 2 Increase energy efficiency citywide 16% for electricity and 12% for natural gas of 2018 values.   | Strategy EB 2-B: Support and accelerate energy efficiency citywide.  | 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.  | 1    |
| Energy & Built<br>Environment | CAP  | Goal EB 2 Increase energy efficiency citywide 16% for electricity and 12% for natural gas of 2018 values.   | Strategy EB 2-B: Support and accelerate energy efficiency citywide.  | 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.   | 1    |

| Energy & Built Environment  CAP  Goal EB 2 Increase energy efficiency citywide 16% for electricity and 12% for natural gas of 2018 values.  Strategy EB 2-C: Increase net zero of homes Citywide by 2030.  Strategy EB 2-C: Increase net zero  Strategy EB 2-C: Increase net zero  City's Net Zero Energy Builting Provide training on solar ready a Cityled and Solar People Cityled And Cityled Cityled And Cityled And Cityled And Cityled Cityled Cityled And Cityled Ci | e City's Net Zero Energy Building Guide document to local home nts, designers, homebuilder associations, and realtors. Include the uide and Solar Ready Guideline documents on the City's Design Guidelines webpage.  net-zero strategies as found in the City's Net Zero Energy Building   |
|--|---|
| Coal ED 2 Increase operary officionary off | net-zero strategies as found in the City's Net Zero Energy Building   |
|  | s to area homeowners, multi-family building owners, local builders s. Goal: 1% market coverage (300 households) attending training annually.  |
| Energy & Built Environment  CAP Goal EB 3 Support decarbonization of the local electricity grid.  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.  Strategy EB 3-A: Support Duke Energy's grid emissions goal of 50% below 2005 levels by 2030.   | ne development of a pilot/demonstration community solar program in subscribed annual community solar energy by 2030. Identify ownfield, superfund sites, or detention pond sites (for floating solar) to develop and install pilot solar garden. Collaboratively develop and developers to advance community solar options and subscriptions acts that benefit all residents, particularly communities of color and clude community solar option benefiting small businesses. |
| CAP Goal E8 3 Support decarbonization of the local electricity Strategy E8 3-8. Advocate for stronger E83-8-1 enabling legislation for Commi   | , industry, and state agencies to support the State establishing the ial Property Assessed Clean Energy (C -PACE) and Residential ssisted Clean Energy (R-PACE) financing.  |
| Energy & Built Environment  CAP Goal EB 3 Support decarbonization of the local electricity grid.  Strategy EB 3-B: Advocate for stronger State policy.  Strategy EB 3-B: Advocate for stronger State policy.  EB3-B-2  policies and laws to expand the commercial, and industrial cus Purchase Agreements, Solar Levinase Agreements and Levinase Agreeme | s, industry, and state agencies to support the State in establishing narket for renewable energy, make it easier for large multi-family, ners to benefit from renewable energy (e.g. feed-in tariff, Power igreements, roof space rental, community solar, virtual net metering, ude information on current State of Indiana related regulations and cost and payback information.  |
| Energy & Built Environment  CAP Goal EB 4 Promote "fuel switching" to reduce on-site fossil fuel use in the building sector by 3% of 2018 values.  CAP Goal EB 4 Promote "fuel switching" to reduce on-site fossil fuel combustion systems citywide by 2% of 2018 consumption levels (natural)  The combustion of on-site fossil fuel combustion systems citywide by 2% of 2018 consumption levels (natural)  The combustion of on-site fossil fuel combustion systems citywide by 2% of 2018 consumption levels (natural)   | ent and Action Plan" to outline actions and priorities for electrification ds zero on-site fossil fuel combustion. Work with regional energy I City facilities. Include new and existing buildings, explore strategies eate a case study to highlight and share challenges, solutions, and urned to share with the broader community.   |
| CAP Godal E4 Profitore I der Switching to reduce or 19-ster lossin on-site fossil fuel combustion by 1% of E84-B-1 residential and commercial custor   | otion for Renewable Natural Gas sourced from regional sources for rs. Program to include tracking for citywide natural gas reporting for 6 use by 2030 (150 households and 30 businesses per year).   |
| Energy & Built Environment  CAP Goal EB 4 Promote "fuel switching" to reduce on-site fossil fuel combustion by 1% of fuel use in the building sector by 3% of 2018 values.  Goal EB 4 Promote "fuel switching" to reduce on-site fossil fuel combustion by 1% of fuel use in the building sector by 3% of 2018 values.  Goal EB 4 Promote "fuel switching" to reduce on-site fossil fuel combustion by 1% of 2019 consumption by 1% of 2019 consum | Bloomington Waste To Energy Taskforce, the City should further bic digester wastewater-to-energy installation at the Dillman Road on of biogas as renewable natural gas source for city facilities, large or community residents should be included in study.   |
|  | eficial use of landfilled solid waste stream through waste-to-energy n plasma gasification, methane capture, and anaerobic digestion.   |
| CAP God Eb 3 includes a including options for Einstein Energy and Resource Costs and Eb5-A-1 Bloomington Housing Authority   | e and supportive housing serving organizations, the County, and the ensure that efficiency and renewable programs, incentives, and eet the specific needs of these populations.   |
| Energy & Built Environment  CAP  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.  CAP  Goal EB 5 Increase financing options for Energy Efficiency and Resource Costs and Ownership.  | Vectren to increase energy efficiency funding options for families II financing, Pay As You Save, and other programs as determined to be most effective.  |
|  | y fund to invest in energy efficiency and renewable energy projects oved equity in Renewable Energy and Energy Efficiency in the community.   |
| Energy & Built CAD Goal EB 5 Increase financing options for Energy Efficiency Strategy EB 5-A. Promote Equity in   | izens Action Coalition to establish and regularly host utility bill clinics a Citizens Utility Board (http://cubminnesota.org/) to help residents ye savings options, and hear about rebate/incentive availability and clean energy options.  |
| Phase 2 (2023-2026)  |   |
| Engrav & Built Coal ER 1 Increase distributed renewable energy to Strategy ER 1.A: Increase solar on City Study City facilities and potenti  | partner entities to identify low-carbon district heating and cooling rid project options and select, by 2024, a project to implement as a pilot project.  |
| Energy & Built Environment  Goal EB 1 Increase distributed renewable energy to 250,000 MWH of total generation annually by 2030.  Goal EB 1 Increase distributed renewable energy to 250,000 MWH of total generation annually by 2030.  EB1-B-5  EB1-B-5  EB1-B-5  EB1-B-5   | al of customer-owned photovoltaics to the infrastructure, economics alysis should include time of generation, capacity credit, distribution stics, technical and market potential, resilience, etc. (Value of Solar ared with community businesses and Bloomington Economic oration for information to advance solar awareness.   |

|                               |     | ,   |   |          |  |   |
|-------------------------------|-----|---|---|----------|--|---|
| Energy & Built<br>Environment | CAP | Goal EB 1 Increase distributed renewable energy to 250,000 MWH of total generation annually by 2030.      | Strategy EB 1-B: Support and accelerate installation of on-site solar PV to 250,000 MWH of total generation citywide annually by 2030.                | EB1-B-6  | Motivate and assist businesses throughout the community to install solar. Provide information on solar incentives, tools, and financing to businesses throughout the City.   | 2 |
| Energy & Built<br>Environment | CAP | Goal EB 1 Increase distributed renewable energy to 250,000 MWH of total generation annually by 2030.      | Strategy EB 1-B: Support and accelerate installation of on-site solar PV to 250,000 MWH of total generation citywide annually by 2030.                | EB1-B-7  | Establish a Solar Ready Ordinance to require all new residential and commercial buildings to be solar ready  | 2 |
| Energy & Built<br>Environment | CAP | Goal EB 1 Increase distributed renewable energy to 250,000 MWH of total generation annually by 2030.      | Strategy EB 1-B: Support and accelerate installation of on-site solar PV to 250,000 MWH of total generation citywide annually by 2030.                | EB1-B-8  | Promote, provide and distribute the City's Solar Ready Guide document to local home shows or remodeler showcase events, designers, homebuilder associations, and realtors. Include the City's Solar Ready Guideline documents on the City's Design Guidelines webpage  | 2 |
| Energy & Built<br>Environment | CAP | Goal EB 1 Increase distributed renewable energy to 250,000 MWH of total generation annually by 2030.      | Strategy EB 1-C: Improve energy policy  | EB1-C-2  | Complete the SolSmart process to streamline permitting for renewable energy installations and assist in reducing solar project "soft costs" related to City solar processes. Achieve a Sol smart Gold rating by 2025   | 2 |
| Energy & Built<br>Environment | CAP | Goal EB 1 Increase distributed renewable energy to 250,000 MWH of total generation annually by 2030.      | Strategy EB 1-C: Improve energy policy  | EB1-C-3  | Establish Solar Access Ordinance and policies which recognize changing conditions due to the proliferation of residential rooftop solar energy systems.  | 2 |
| Energy & Built<br>Environment | 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<br>owned building electrical energy<br>efficiency 16% for electricity and 12%<br>for natural gas of 2018 values. | EB2-A-5  | Continue conversion of City streetlights and signals to LED. Complete 100% conversion by 2026  | 2 |
| Energy & Built<br>Environment | 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<br>owned building electrical energy<br>efficiency 16% for electricity and 12%<br>for natural gas of 2018 values. | EB2-A-6  | Conduct an Occupancy and Plug Load Energy Efficiency Study of primary city owned facilities to identify plug load control strategies and establish a "Plug Load and Occupancy Energy Efficiency Guide" outlining operational practices to advance the City's energy efficiency goals for City facilities. Provide training to all existing city employees and provide on-going training to all new city hires.   | 2 |
| Energy & Built<br>Environment | CAP | Goal EB 2 Increase energy efficiency citywide 16% for electricity and 12% for natural gas of 2018 values. | Strategy EB 2-B: Support and accelerate energy efficiency citywide.   | EB2-B-4  | Work with partner organizations to promote building retro commissioning and operation and maintenance practices that improve affordability, comfort, indoor air quality and energy efficiency in all commercial and multifamily buildings. Goal: 60 businesses commissioned annually.  | 2 |
| Energy & Built<br>Environment | CAP | Goal EB 2 Increase energy efficiency citywide 16% for electricity and 12% for natural gas of 2018 values. | Strategy EB 2-B: Support and accelerate energy efficiency citywide.   | EB2-B-5  | Collaborate with utilities, community partners, and rental property owners to promote and provide comprehensive audits followed by energy efficiency upgrades benefiting multifamily residents, with a particular focus on low-income communities. Goal: Achieve 220 audits and upgrades annually  | 2 |
| Energy & Built<br>Environment | CAP | Goal EB 2 Increase energy efficiency citywide 16% for electricity and 12% for natural gas of 2018 values. | Strategy EB 2-B: Support and accelerate energy efficiency citywide.   | EB2-B-6  | Develop a "Green Roof" pilot project to exhibit heat island mitigation strategies and measure potential for effectiveness. Identify city building with low solar PV prioritization/feasibility for inclusion as cool roof pilot location. Alternatively, pilot program could be advertised for submission by City of Bloomington residents, businesses and neighborhoods for potential sites to be considered for pilot project selection. Preference should be given to sites serving low income or at risk communities with high heat island impact potential. | 2 |
| Energy & Built<br>Environment | CAP | Goal EB 2 Increase energy efficiency citywide 16% for electricity and 12% for natural gas of 2018 values. | Strategy EB 2-B: Support and accelerate energy efficiency citywide.   | EB2-B-7  | Develop specific energy efficiency programs for hard-to-reach segments of multi-family and commercial properties (e.g., commercial rental, restaurants, large scale manufacturing, offices, affordable multifamily housing). Explore partnerships to include a job training component focused on providing training to low income community members in the program   | 2 |
| Energy & Built<br>Environment | CAP | Goal EB 2 Increase energy efficiency citywide 16% for electricity and 12% for natural gas of 2018 values. | Strategy EB 2-B: Support and accelerate energy efficiency citywide.   | EB2-B-8  | Enable institutions within each sector to learn about successful efficiency work through pilots, workshops, and case studies.  | 2 |
| Energy & Built<br>Environment | CAP | Goal EB 2 Increase energy efficiency citywide 16% for electricity and 12% for natural gas of 2018 values. | Strategy EB 2-B: Support and accelerate energy efficiency citywide.   | EB2-B-9  | Improve training, certification, and education opportunities for energy auditors and professionals involved in the disposal and use of refrigerants.   | 2 |
| Energy & Built<br>Environment | CAP | Goal EB 2 Increase energy efficiency citywide 16% for electricity and 12% for natural gas of 2018 values. | Strategy EB 2-B: Support and accelerate energy efficiency citywide.   | EB2-B-10 | With a focus on low income households and renters, engage residents on low cost ways to save energy and money, such as installing programmable thermostats. Pair educational content with access to incentives and resources.  | 2 |
| Energy & Built<br>Environment | CAP | Goal EB 2 Increase energy efficiency citywide 16% for electricity and 12% for natural gas of 2018 values. | Strategy EB 2-B: Support and accelerate energy efficiency citywide.   | EB2-B-11 | Use a focused outreach program to contact local businesses to encourage participation in energy efficiency programs. Explore the development of an "Energy Reduction Top 50" energy efficiency assessment and recommendation program similar to the "Solar Top 50".  | 2 |
| Energy & Built<br>Environment | CAP | Goal EB 2 Increase energy efficiency citywide 16% for electricity and 12% for natural gas of 2018 values. | Strategy EB 2-B: Support and accelerate energy efficiency citywide.   | EB2-B-12 | Develop a "Cool Roof" pilot project to exhibit heat island mitigation strategies and measure potential for effectiveness. Identify city building with low solar PV prioritization/feasibility for inclusion as cool roof pilot location. Alternatively, pilot program could be advertised for submission by City of Bloomington residents, businesses and neighborhoods for potential sites to be considered for pilot project selection. Preference should be given to sites serving low income or at risk communities with high heat island impact potential.  | 2 |
| Energy & Built<br>Environment | CAP | Goal EB 2 Increase energy efficiency citywide 16% for electricity and 12% for natural gas of 2018 values. | Strategy EB 2-C: Increase net zero energy residential building stock to 1% of homes Citywide by 2030.   | EB2-C-3  | Utilize incentives, vacant City land, and current programs for pilots of net-zero buildings across different sectors. Explore option of issuing a competitive RFP for effective and innovative Net Zero pilot projects. Focus on "Net zero building in every neighborhood" to establish visibility of strategies within the community  | 2 |
| Energy & Built<br>Environment | CAP | Goal EB 3 Support decarbonization of the local electricity grid.  | Strategy EB 3-A: Support Duke<br>Energy's grid emissions goal of 50%<br>below 2005 levels by 2030.  | EB3-A-2  | Collaborate with Duke Energy to develop a pilot / demonstration solar lease program for photovoltaic on buildings connected via net metering open to Duke and third party vendors.   | 2 |
| Energy & Built<br>Environment | CAP | Goal EB 5 Increase financing options for Energy Efficiency and Renewable Energy projects citywide.        | Strategy EB 5-A: Promote Equity in<br>Energy and Resource Costs and<br>Ownership.   | EB5-A-5  | Create a coordinated "one-stop" program approach to expand low-income housing programs by layering healthy homes, lead abatement, bill clinic, weatherization, and renewable energy programs.  | 2 |
| Energy & Built<br>Environment | CAP | Goal EB 5 Increase financing options for Energy Efficiency and Renewable Energy projects citywide.        | Strategy EB 5-A: Promote Equity in<br>Energy and Resource Costs and<br>Ownership.   | EB5-A-6  | Establish a Community Cost Share Fund for tax advantaged donations applied towards energy efficiency improvements and renewable energy projects for renters.   | 2 |
|                               |     | ·   |   |          | -  |   |

| Energy & Built<br>Environment | CAP   | Goal EB 5 Increase financing options for Energy Efficiency and Renewable Energy projects citywide.  | Strategy EB 5-A: Promote Equity in<br>Energy and Resource Costs and<br>Ownership.  | EB5-A-7  | Develop tools to finance energy efficiency and renewable energy retrofits for commercial and residential buildings that have low barriers to entry and limited risk for local government and that are broadly accessible to households and building owners, including rental properties, throughout the community. Potential tools may include Guaranteed Energy Savings program, Carbon Market funding, Mortgage-Backed Energy Efficiency and Renewable Energy Financing, and Municipal Energy Efficiency and Renewable Energy Revolving Loan, and Municipal rebates. Combine offerings with Duke Energy and Vectren incentive programs. Explore establishing a tiered incentive program with increasing incentivization for projects achieving 5%, 10%, 15%, and higher improved, measured energy efficiency over code requirements as well as an incentive add for low income beneficiaries | 2           |
|-------------------------------|-------|---|--|----------|--|-------------|
| Energy & Built<br>Environment | CAP   | Goal EB 5 Increase financing options for Energy Efficiency and Renewable Energy projects citywide.  | Strategy EB 5-A: Promote Equity in<br>Energy and Resource Costs and<br>Ownership.  | EB5-A-8  | Explore partnering City's investment and financing concepts with Indiana University to establish collaborative financing mechanisms, program, or implementation strategy to advance equitable energy efficiency and renewable energy in the community.   | 2           |
| Phase 3 (2026-2               | 2030) |   |  |          |  |             |
| Energy & Built<br>Environment | CAP   | Goal EB 2 Increase energy efficiency citywide 16% for electricity and 12% for natural gas of 2018 values.   | Strategy EB 2-B: Support and accelerate energy efficiency citywide.  | EB2-B-13 | Adopt, implement, and promote a Residential Energy Benchmarking and Disclosure or "Truth In Sale" ordinance for homes listed for sale.   | 3           |
| Energy & Built<br>Environment | CAP   | Goal EB 2 Increase energy efficiency citywide 16% for electricity and 12% for natural gas of 2018 values.   | Strategy EB 2-B: Support and accelerate energy efficiency citywide.  | EB2-B-14 | Host a "data jam" session in support of benchmarking ordinances where building managers can enter energy with technical assistance providers present.  | 3           |
| Energy & Built<br>Environment | CAP   | Goal EB 2 Increase energy efficiency citywide 16% for electricity and 12% for natural gas of 2018 values.   | Strategy EB 2-B: Support and accelerate energy efficiency citywide.  | EB2-B-15 | Develop a "Cool Pavement" pilot project to exhibit heat island mitigation strategies and measure potential for effectiveness. Identify city road or parking pavement location with high micro heat island potential for pilot project location. Alternatively, pilot program could be advertised for submission by City of Bloomington residents, businesses and neighborhoods for potential sites to be considered for pilot project selection. Preference should be given to sites serving low income or at risk communities with high heat island impact potential.   | 3           |
| Energy & Built<br>Environment | CAP   | Goal EB 3 Support decarbonization of the local electricity grid.  | Strategy EB 3-B: Advocate for stronger<br>State policy.  | EB3-B-3  | Collaborate with other communities, industry, and state agencies to support the State advancing increased energy efficiency building code requirements, establishing minimum energy performance requirements, net zero considerations and/or the establishment legislation enabling cities to establish "stretch codes" within their jurisdiction.   | 3           |
| Energy & Built<br>Environment | CAP   | Goal EB 4 Promote "fuel switching" to reduce on-site fossil fuel use in the building sector by 3% of 2018 values.   | 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). | EB4-A-2  | Explore the establishment of polices or ordinances supporting all electric buildings, such as an all electric requirement for buildings receiving PUD or Conditional Use Permit approvals, an all electric reach code such as Menlo Park, or a natural gas ban such as Berkeley.   | 3           |
| Energy & Built<br>Environment | CAP   | Goal EB 4 Promote "fuel switching" to reduce on-site fossil fuel use in the building sector by 3% of 2018 values.   | 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). | EB4-A-3  | Deploy an incentive program for electrification. Work with Duke Energy or other regional partnerships to create financial incentives to electrify new and existing buildings. For example, rebates for panel upgrades, electric appliances, electric water heaters, Air Source Heat Pumps, and Ground Source Heat Pumps can encourage the transition to electric energy use in homes and businesses. Goal: Goal 3% residential market conversion (90 households annually) and 3% commercial/industrial market conversion (an estimated 15 commercial businesses, 3 industrial businesses annually) by 2030. Collaborate with program partners to quantify potential cost savings of electrification and provide ROI information to potential program participants.   | 3           |
| Energy & Built<br>Environment | CAP   | Goal EB 5 Increase financing options for Energy Efficiency and Renewable Energy projects citywide.  | Strategy EB 5-A: Promote Equity in<br>Energy and Resource Costs and<br>Ownership.  | EB5-A-9  | Evaluate the potential for a municipal or regional carbon tax or fee with dividends provided to lower income individuals. Funds to be used to support and promote energy efficiency and no/low carbon energy transitions for low income and vulnerable individuals.  | 3           |
| Energy & Built<br>Environment | CAP   | Goal EB 5 Increase financing options for Energy Efficiency and Renewable Energy projects citywide.  | Strategy EB 5-A: Promote Equity in<br>Energy and Resource Costs and<br>Ownership.  | EB5-A-10 | Establish a Renewable Energy TIFF Policy, requiring on-site renewable energy for all projects receiving TIF financing. Policy could also include the establishment of a Renewable Energy TIF District specifically identifying TIF financing potential for properties receiving redevelopment which include on-site renewable energy.  | 3           |
|                               |       |   | -  |          |  | 1           |
| Category                      | Plan  | Goal  | Strategy   | Action   | Action Description   | Year/ Phase |
| Transportation                |       |   |  |          |  |             |
| 2018 Goals                    |       |   |  |          |  |             |
| Transportation                | 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   |  | 3.6.a.   | Expand "Way-To-Go" user-training program offered by BT and monitor participation rates   | 2018        |
| 2019 Goals                    |       |   |  |          |  |             |
| Transportation                | SAP   | GOAL 3.1: Ensure Five Urban Village Centers meet the criteria established in the Comprehensive Plan by 2023   |  | 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   | 2019        |
| Transportation                | SAP   | GOAL 3.1: Ensure Five Urban Village Centers meet the criteria established in the Comprehensive Plan by 2023   |  | 3.1.b.   | Incorporate electric vehicle charging stations into sustainable development incentives to influence common infrastructure at Urban Village Centers   | 2019        |
| Transportation                | 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) |  | 3.2.a.   | Work with businesses to expand bicycle parking and encourage participation in the American League of Cyclists Bicycle Friendly Business program  | 2019        |
|                               |       |   |  |          |  |             |

| Transportation | 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) | 3.2.b. | Expand the use of marketing efforts for bike share program  | 2019             |
|----------------|-----|---|--------|---|------------------|
| Transportation | 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) | 3.2.c. | Create a campaign to encourage use of car share programs in lieu of automobile ownership through marketing and incentives   | 2019             |
| Transportation | SAP | GOAL 3.3: Achieve bicycle and pedestrian fatality rates of zero by 2023   | 3.3.a. | Encourage citizen use of UReport mechanism to report safety issues  | 2019             |
| Transportation | 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   | 3.6.b. | Assess Walk Score ratings for public transit for Bloomington's 56 neighborhoods to determine needed route improvements  | 2019             |
| Transportation | 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   | 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 | 2019             |
| 2020 Goals     |     |   |        |   |                  |
| Transportation | SAP | GOAL 3.1: Ensure Five Urban Village Centers meet the criteria established in the Comprehensive Plan by 2023   | 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   | 2020             |
| Transportation | SAP | GOAL 3.3: Achieve bicycle and pedestrian fatality rates of zero by 2023   | 3.3.b. | Adopt a Vision Zero Policy to signal commitment to zero safety incidents in the community   | 2020             |
| Transportation | SAP | GOAL 3.3: Achieve bicycle and pedestrian fatality rates of zero by 2023   | 3.3.c. | Develop schedule for improvements and implement at most dangerous intersections, as identified by the Bloomington Monroe County Metropolitan Planning Organization  | 2020             |
| Transportation | SAP | GOAL 3.4: Achieve the Walk Friendly Communities Platinum level designation by 2022  | 3.4.a. | Host a "Walking to Platinum" community summit to identify priority actions and opportunities to enhance walkability in Bloomington  | 202              |
| Transportation | SAP | GOAL 3.4: Achieve the Walk Friendly Communities Platinum level designation by 2022  | 3.4.b. | Focus priorities for infrastructure investment using Walk Scores, Urban Village Center designations and socio-economic data   | 202              |
| Transportation | SAP | GOAL 3.4: Achieve the Walk Friendly Communities Platinum level designation by 2022  | 3.4.c. | Implement recommended projects in 2018 Transportation Plan to increase the miles of pedestrian pathways and sidewalks that support multi-modal transportation   | 202              |
| Transportation | SAP | GOAL 3.5: Achieve the League of American Bicyclists Platinum Rating by 2022   | 3.5.a. | Develop a new Complete Streets Policy and Design Guidebook  | 202              |
| Transportation | SAP | GOAL 3.5: Achieve the League of American Bicyclists Platinum Rating by 2022   | 3.5.b. | Develop and implement a plan for improved lighting on bicycle paths   | 202              |
| Transportation | SAP | GOAL 3.6: Increase the use of the Bloomington Transit<br>system 5 percent by 2023, relative to a baseline of 3.3<br>million transit users in 2017   | 3.6.d. | Make all youth tickets on BT free   | 2020             |
| Transportation | SAP | GOAL 3.6: Increase the use of the Bloomington Transit<br>system 5 percent by 2023, relative to a baseline of 3.3<br>million transit users in 2017   | 3.6.e. | Collaborate with employers to provide transit benefits programs that promote use of public transit  | 2020             |
| 2021 Goals     |     |   |        |   |                  |
| Transportation | 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) | 3.2.d. | Develop a program to encourage local businesses and major empoloyers 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                             | 202 <sup>-</sup> |
| Transportation | SAP | GOAL 3.5: Achieve the League of American Bicyclists Platinum Rating by 2022   | 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   | 202              |
| Transportation | SAP | GOAL 3.5: Achieve the League of American Bicyclists Platinum Rating by 2022   | 3.5.d. | Increase safe and secure bicycle parking through covered parking and indoor options   | 202              |
| 2022 Goals     |     |   |        |   |                  |
| Transportation | SAP | GOAL 3.3: Achieve bicycle and pedestrian fatality rates of zero by 2023   | 3.3.d. | Implement a 4 to 5 second vehicle traffic signal delay after pedestrian lights indicate "walk" so that<br>pedestrians and cyclists have time to become visible before automobiles are given the green light   | 202              |
| 2023 Goals     |     |   |        |   |                  |
| Transportation | SAP | GOAL 3.1: Ensure Five Urban Village Centers meet the criteria established in the Comprehensive Plan by 2023   | 3.1.d. | Attract a variety of amenities to locate in or near priority Village Centers  | 202              |
| Transportation | SAP | GOAL 3.1: Ensure Five Urban Village Centers meet the criteria established in the Comprehensive Plan by 2023   | 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   | 202              |
| Transportation | SAP | GOAL 3.1: Ensure Five Urban Village Centers meet the criteria established in the Comprehensive Plan by 2023   | 3.1.f. | Locate planned affordable housing within or nearby Village Centers or collaborate to pilot affordable housing in the vicinity   | 202              |
| Transportation | SAP | GOAL 3.5: Achieve the League of American Bicyclists Platinum Rating by 2022   | 3.5.e. | Increase the miles of bicycle facilities, including those recommended in the 2018 Transportation Plan and Transform 2040 Plan   | 202              |

| Transportation and Land Use | 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.            | TL1-B-2 | Implement the Multimodal Projects recommendations included in the 2019 City of Bloomington<br>Transportation Plan and BMCMPO's Transportation Improvement Program.  | 1 |
|-----------------------------|-----|--|--|---------|---|---|
| Transportation and Land Use | CAP | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-C: Increase transit utilization by 10% over 2018 passenger miles by 2030 through infrastructure and frequency investments.                   | TL1-C-1 | Implement recommendations of the Bloomington Route Optimization Study.  | 1 |
| Transportation and Land Use | CAP | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-C: Increase transit utilization by 10% over 2018 passenger miles by 2030 through infrastructure and frequency investments.                   | 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.   | 1 |
| Transportation and Land Use | CAP | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-C: Increase transit utilization by 10% over 2018 passenger miles by 2030 through infrastructure and frequency investments.                   | 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.  | 1 |
| Transportation and Land Use | CAP | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-D: Increase shared mobility (carpooling) utilization by 3% of work commute trips.  | 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.   | 1 |
| Transportation and Land Use | CAP | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-D: Increase shared mobility (carpooling) utilization by 3% of work commute trips.  | 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.   | 1 |
| Transportation and Land Use | CAP | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-E: Encourage density<br>and increase housing options and<br>affordability with the goal of increasing<br>gross density by 3% of 2018 values. | 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.   | 1 |
| Transportation and Land Use | CAP | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-E: Encourage density<br>and increase housing options and<br>affordability with the goal of increasing<br>gross density by 3% of 2018 values. | TL1-E-2 | Reevaluate minimum parking requirements in the Unified Development Ordinance as listed in Table 04-<br>9: Minimum Vehicle Parking Requirements. Require parking for all modes of travel in project design, as appropriate.  | 1 |
| Transportation and Land Use | CAP | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-E: Encourage density<br>and increase housing options and<br>affordability with the goal of increasing<br>gross density by 3% of 2018 values. | 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.   | 1 |
| Transportation and Land Use | CAP | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-F: Build Complete<br>Streets; goal 10% increase in Complete<br>Street coverage by 2030.  | 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. Resource: 2018 MPO Complete Streets Policy   | 1 |
| Transportation and Land Use | CAP | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-F: Build Complete<br>Streets; goal 10% increase in Complete<br>Street coverage by 2030.  | 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  | 1 |
| Transportation and Land Use | CAP | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-G: Increase pedestrian access and safety.  | TL1-G-1 | Implement improvement recommendations of the 2019 Transit Stop Safety and Accessibility Assessment.   | 1 |
| Transportation and Land Use | CAP | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-G: Increase pedestrian access and safety.  | TL1-G-2 | Create and implement a 5 year transportation funding plan that matches the MPO Metropolitan<br>Transportation Plan and 2019 Transportation Plan.  | 1 |
| Transportation and Land Use | CAP | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-H: Reduce<br>commercial/industrial vehicle use by 8%<br>of 2018 values   | 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.   | 1 |
| Transportation and Land Use | CAP | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-I: Reduce citywide off-<br>road and lawn equipment annual<br>emissions to below 35,000 metric tons   | TL1-I-1 | Introduce a policy to replace City off-road and lawn equipment with electric and lowcarbon 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   | 1 |
| Transportation and Land Use | CAP | Goal TL 2 Support and encourage electric vehicle adoption, achieve 30% of vehicles sold and 15% of VMT community-wide by 2030. | Strategy TL 2-A: Transition City fleet to electric vehicle and alternative fuels (hybrid/ hybrid electric, plug in hybrid electric).                       | 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.  | 1 |
| Transportation and Land Use | CAP | Goal TL 2 Support and encourage electric vehicle adoption, achieve 30% of vehicles sold and 15% of VMT community-wide by 2030. | Strategy TL 2-B: Support and encourage electric vehicle and alternative fuel (hybrid/ hybrid electric, plug in hybrid electric) vehicle adoption citywide. | 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.  | 1 |
| Transportation and Land Use | CAP | Goal TL 2 Support and encourage electric vehicle adoption, achieve 30% of vehicles sold and 15% of VMT community-wide by 2030. | Strategy TL 2-B: Support and encourage electric vehicle and alternative fuel (hybrid/ hybrid electric, plug in hybrid electric) vehicle adoption citywide. | 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 | 1 |

| Transportation and Land Use | CAP  | Goal TL 2 Support and encourage electric vehicle adoption, achieve 30% of vehicles sold and 15% of VMT community-wide by 2030. | Strategy TL 2-B: Support and encourage electric vehicle and alternative fuel (hybrid/ hybrid electric, plug in hybrid electric) vehicle adoption citywide.  | 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.  | 1 |
|-----------------------------|------|--|---|---------|--|---|
| Phase 2 (2023-20            | 026) |  |   |         |  |   |
| Transportation and Land Use | CAP  | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-A: Reduce single occupancy automobile use by 8% of 2018 values.   | TL1-A-3 | Conduct a road pricing strategy study to explore options appropriate for the City of Bloomington that accurately capture the cost of driving and auto-centric infrastructure on city roads. Include a study on parking fees, demand-based fees, fee discounts for carpools and EV's and fuel efficiency charge options.  Study should include national and international case studies and identify pilot projects for implementation.                        | 2 |
| Transportation and Land Use | CAP  | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-A: Reduce single occupancy automobile use by 8% of 2018 values.   | TL1-A-4 | Identify locations and partners to facilitate parking buyback programs for municipal and other employers in the city   | 2 |
| Transportation and Land Use | CAP  | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-B: Increase<br>bicycle/pedestrian commuting from 17%<br>to 18% by creating infrastructure to<br>better encourage alternatives to<br>vehicles. | TL1-B-3 | Enhance bike and pedestrian travel options through creating protected bike lanes on key travel corridors and improved pedestrian efficiency through mobile route mapping. Conduct a study to identify and prioritize routes and establish an implementation plan and schedule.   | 2 |
| Transportation and Land Use | CAP  | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-B: Increase<br>bicycle/pedestrian commuting from 17%<br>to 18% by creating infrastructure to<br>better encourage alternatives to<br>vehicles. | TL1-B-4 | Promote usage of the Sustainability Development Incentive: density bonuses or expedited review for development projects that have mixed-used zoning (residential, retail and office uses).   | 2 |
| Transportation and Land Use | CAP  | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-B: Increase<br>bicycle/pedestrian commuting from 17%<br>to 18% by creating infrastructure to<br>better encourage alternatives to<br>vehicles. | TL1-B-5 | Provide additional earmarked funding and/or prioritization to projects with clear safety and VMT reduction goals. Accelerate 2019 City of Bloomington Transportation Plan, priority bicycle network (5-7 year), pedestrian network, balancing work load, and funding.  | 2 |
| Transportation and Land Use | CAP  | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-B: Increase<br>bicycle/pedestrian commuting from 17%<br>to 18% by creating infrastructure to<br>better encourage alternatives to<br>vehicles. | TL1-B-6 | Encourage development of projects within mixed use districts that promote a combination of neighborhood-scale residential, commercial, and institutional uses with pedestrian-oriented design and multi-modal transportation options. Developments should maximize equity considerations and minimize community wide VMT by creating a more walkable, bikeable, and transit friendly community.  | 2 |
| Transportation and Land Use | CAP  | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-C: Increase transit utilization by 10% over 2018 passenger miles by 2030 through infrastructure and frequency investments.                    | TL1-C-4 | Collaborate with Bloomington businesses to promote and expand on the Guaranteed Ride Home program, and expand participation in the Employer Sponsored Pass program for workplaces to purchase bus passes for employees, students, etc.   | 2 |
| Transportation and Land Use | CAP  | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-C: Increase transit utilization by 10% over 2018 passenger miles by 2030 through infrastructure and frequency investments.                    | TL1-C-5 | Improve efficiency, convenience, and reliability of bus service and infrastructure (dedicated lanes). Increase bus frequency, establish dedicated bus routes, and create high-frequency rapid transit in corridors to improve "time equity / parity" of the route transit time with what it would be to drive a car. Prioritization to be given on routes serving the city's many employment centers and areas with higher shares of vulnerable populations. | 2 |
| Transportation and Land Use | CAP  | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-D: Increase shared mobility (carpooling) utilization by 3% of work commute trips.   | TL1-D-3 | Establish a communication campaign to effectively reach users to promote electric bicycle, skateboard, and scooter policies and promote use  | 2 |
| Transportation and Land Use | CAP  | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-D: Increase shared mobility (carpooling) utilization by 3% of work commute trips.   | TL1-D-4 | Establish a minimum of 2 EV car sharing locations in the City by 2023.   | 2 |
| Transportation and Land Use | CAP  | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-E: Encourage density<br>and increase housing options and<br>affordability with the goal of increasing<br>gross density by 3% of 2018 values.  | TL1-E-4 | Conduct a Development Study to identify and prioritize available sites for redevelopment and in-fill development to advance City's walkability, bikeability, and transit utilization. Study should include a review of under utilized surface parking infrastructure capable of being redeveloped.   | 2 |
| Transportation and Land Use | CAP  | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-E: Encourage density<br>and increase housing options and<br>affordability with the goal of increasing<br>gross density by 3% of 2018 values.  | TL1-E-5 | Issue competitive redevelopment Request for Proposals based on findings and recommendations of<br>Development Study to encouraging high quality mixed use redevelopment on redevelopment, infill<br>properties and existing surface parking lots within downtown district. RFP's should focus on equity,<br>affordability, livability, and compliance/ support of Climate Action Plan goals.   | 2 |
| Transportation and Land Use | CAP  | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-E: Encourage density<br>and increase housing options and<br>affordability with the goal of increasing<br>gross density by 3% of 2018 values.  | TL1-E-6 | Implement form-based code along transportation corridors with goal of improved pedestrian experience (frequent access points, greenspace).   | 2 |
| Transportation and Land Use | CAP  | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-E: Encourage density<br>and increase housing options and<br>affordability with the goal of increasing<br>gross density by 3% of 2018 values.  | TL1-E-7 | Establish an ordinance to require developers and landlords to "unbundle" parking from rent structures.  Policy should focus on maintaining transit and transportation equity.  | 2 |
| Transportation and Land Use | CAP  | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-F: Build Complete<br>Streets; goal 10% increase in Complete<br>Street coverage by 2030.   | TL1-F-3 | Establish a method for projecting the lifecycle carbon emissions of land use and transportation investments associated with the City's Transportation Plan and Transportation Improvement Program including consideration of embodied energy, operations and maintenance   | 2 |

|                             |      |  | Olympia TI 4 F B THO wilder   |         | Advantage of the Control of the Market of th |   |
|-----------------------------|------|--|---|---------|--|---|
| Transportation and Land Use | CAP  | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-F: Build Complete<br>Streets; goal 10% increase in Complete<br>Street coverage by 2030.   | TL1-F-4 | Adopt project review criteria for City transportation projects that align with and complement the MPO Complete Streets policy and prioritize low carbon modes of transportation, including, but not limited to pedestrians, bicyclists, and public transit infrastructure.   | 2 |
| Transportation and Land Use | CAP  | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-F: Build Complete<br>Streets; goal 10% increase in Complete<br>Street coverage by 2030.   | TL1-F-5 | Align City's Transportation Plan and Transportation Improvement Program regional mode share targets with carbon reduction targets and encourage the development of mode share goals specific to the varying community needs and transit infrastructure around the region   | 2 |
| Transportation and Land Use | CAP  | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-G: Increase pedestrian access and safety.   | TL1-G-3 | Establish an implementation plan for the redesign of roads to be safer for people including road width reductions on all four-lane city streets as well as on multi-lane onway streets, installing curb extensions, and refuge medians.  | 2 |
| Transportation and Land Use | CAP  | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-G: Increase pedestrian access and safety.   | TL1-G-4 | Develop a Safe Routes To Schools Implementation Plan (SRTS) for all schools within the City. Plan implementation should focus on infrastructure and policy changes as well as education and encouragement.   | 2 |
| Transportation and Land Use | CAP  | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-G: Increase pedestrian access and safety.   | TL1-G-5 | Prioritize transportation funding for Vision Zero engineering improvement projects paired with VMT reduction strategies to create safe streets for people walking, biking and riding transit.  | 2 |
| Transportation and Land Use | CAP  | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-H: Reduce<br>commercial/industrial vehicle use by 8%<br>of 2018 values  | TL1-H-2 | Collaborate with the Bloomington Chamber of Commerce, Downtown Bloomington, community businesses, and Indiana University to conduct a study identifying the advantages/disadvantages, and lessons learned by businesses in the community related to use of video/remote meetings in lieu of business travel for meetings and events. Based on findings of the study, establish, distribute, and promote a "best practices" guide outlining the opportunities for operational savings and reduced vehicle use and encouraging effective, long-term increased remote meeting technologies.   | 2 |
| Transportation and Land Use | CAP  | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-H: Reduce commercial/industrial vehicle use by 8% of 2018 values  | TL1-H-3 | Collaborate with partners including Indiana Railroad, Monroe County, and Bloomington Chamber of Commerce, and Indiana University to assess railroad infrastructure and Bloomington business community transportation needs, identify rail freight system and service improvements to increase utilization and encourage rail system owners to make improvements.   | 2 |
| Transportation and Land Use | CAP  | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-H: Reduce commercial/industrial vehicle use by 8% of 2018 values  | TL1-H-4 | Establish a freight committee as part of an existing MPO committee as noted in the Metropolitan<br>Transportation Plan.  | 2 |
| Transportation and Land Use | CAP  | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-I: Reduce citywide off-<br>road and lawn equipment annual<br>emissions to below 35,000 metric tons  | TL1-I-2 | Develop an incentive program to convert fuel-burning lawn equipment such as gaspowered lawn mowers and blowers to electric. Coordinate with Duke Energy for support and identification of additional rebate programs to promote electric yard equipment.   | 2 |
| Transportation and Land Use | CAP  | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-I: Reduce citywide off-<br>road and lawn equipment annual<br>emissions to below 35,000 metric tons  | TL1-I-3 | Establish a gas powered lawn equipment phase-out ordinance transitioning to lawn equipment powered by electricity or alternative clean fuels and decreased noise pollution levels.   | 2 |
| Transportation and Land Use | CAP  | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-I: Reduce citywide off-<br>road and lawn equipment annual<br>emissions to below 35,000 metric tons  | TL1-I-4 | Develop an incentive program to convert fuel-burning lawn equipment such as gaspowered lawn mowers and blowers to electric. Coordinate with Duke Energy for support and identification of additional rebate programs to promote electric yard equipment.   | 2 |
| Transportation and Land Use | CAP  | Goal TL 2 Support and encourage electric vehicle adoption, achieve 30% of vehicles sold and 15% of VMT community-wide by 2030. | Strategy TL 2-A: Transition City fleet to electric vehicle and alternative fuels (hybrid/ hybrid electric, plug in hybrid electric).                        | TL2-A-2 | Conduct a municipal fleet inventory and EV Implementation plan. Effort to identify opportunities for electrifying, right-sizing, and improving overall efficiency of vehicles to meet CAP Goals. Include implementation recommendations to incorporate EV's through right-timing purchases with a planned vehicle-replacement schedule.  | 2 |
| Transportation and Land Use | CAP  | Goal TL 2 Support and encourage electric vehicle adoption, achieve 30% of vehicles sold and 15% of VMT community-wide by 2030. | Strategy TL 2-B: Support and encourage electric vehicle and alternative fuel (hybrid/ hybrid electric, plug in hybrid electric) vehicle adoption citywide.  | TL2-B-4 | Incentivize the purchase of electric vehicles through rebates on vehicles and/or residential chargers.  Work with utility company on this program. Explore expansion of current Duke program   | 2 |
| Transportation and Land Use | CAP  | Goal TL 2 Support and encourage electric vehicle adoption, achieve 30% of vehicles sold and 15% of VMT community-wide by 2030. | Strategy TL 2-B: Support and encourage electric vehicle and alternative fuel (hybrid/ hybrid electric, plug in hybrid electric) vehicle adoption citywide.  | TL2-B-5 | Incentivize electric vehicle sales by providing low/no cost charging at city owned parking lots and working with employers to provide workplace charging and multi-family property owners to provide rental housing charging.  | 2 |
| Transportation and Land Use | CAP  | Goal TL 2 Support and encourage electric vehicle adoption, achieve 30% of vehicles sold and 15% of VMT community-wide by 2030. | Strategy TL 2-B: Support and encourage electric vehicle and alternative fuel (hybrid/ hybrid electric, plug in hybrid electric) vehicle adoption citywide.  | TL2-B-6 | Explore incentive opportunities to advance installation of EV infrastructure at workplace and multi-family locations.  | 2 |
| Phase 3 (2026-20            | 030) |  |   |         |  |   |
| Transportation and Land Use | CAP  | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-A: Reduce single occupancy automobile use by 8% of 2018 values.   | TL1-A-5 | Determine appropriate locations for car-free pedestrian zones in high-density areas. Establish implementation based on Kirkwood pilot project observations and recommendations. Evaluate feasibility of limiting vehicles on certain days of the week and implementing congestion parking pricing, where appropriate.  | 3 |
| Transportation and Land Use | CAP  | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-A: Reduce single occupancy automobile use by 8% of 2018 values.   | TL1-A-6 | Identify locations and partners to facilitate bike/walk commute, carpooling, EV ride share, and telecommuting options for municipal and other employers in the city.   | 3 |
| Transportation and Land Use | CAP  | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-B: Increase<br>bicycle/pedestrian commuting from 17%<br>to 18% by creating infrastructure to<br>better encourage alternatives to<br>vehicles. | TL1-B-7 | Conduct a Pavement Conversion study to identify underutilized paved areas and identify incentivization and implementation plan to convert identified areas to sustainable green space, and/or pedestrian and biking paths and support space.   | 3 |

| Transportation and Land Use | CAP   | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-C: Increase transit utilization by 10% over 2018 passenger miles by 2030 through infrastructure   | TL1-C-6 | Prioritize transit-oriented development, as defined by the Bloomington Unified Development Ordinance, along existing and planned transit stops and along primary transit corridors.  | 3             |
|-----------------------------|-------|--|---|---------|--|---------------|
| Transportation and Land Use | CAP   | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | and frequency investments.  Strategy TL 1-E: Encourage density and increase housing options and affordability with the goal of increasing gross density by 3% of 2018 values. | TL1-E-8 | Improve the city's average Walkscore from 43 to 60 by 2030. Collaborate with WalkScore for data analysis and identification of high-impact actions to increase score.  | 3             |
| Transportation and Land Use | CAP   | Goal TL 1 Decrease on-road vehicle miles traveled (VMT) by 8% of 2018 values.  | Strategy TL 1-F: Build Complete<br>Streets; goal 10% increase in Complete<br>Street coverage by 2030.   | TL1-F-6 | Explore establishing a tiered bike infrastructure improvement approach which include adding trees and green stormwater infrastructure whenever possible/ prioritized.  | 3             |
| 0.1                         | Di    | Goal   | No.   | A . (*  | A.C. D Calle   | Visit Disease |
| Category                    | Plan  | Goal   | Strategy  | Action  | Action Description   | Year/ Phase   |
| Waste Managen               | nent  |  |   |         |  |               |
| 2019 Goals                  |       |  |   |         |  |               |
| Waste                       | SAP   | GOAL 5.1: Divert at least 40 percent of the volume of residential waste collected by City Sanitation from being landfilled by 2023 |   | 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  | 2019          |
| Waste                       | SAP   | GOAL 5.1: Divert at least 40 percent of the volume of residential waste collected by City Sanitation from being landfilled by 2024 |   | 5.1.b.  | Provide community support for the annual Hoosier to Hoosier Community Sale   | 2019          |
| 2020 Goals                  |       |  |   |         |  |               |
| Waste                       | SAP   | GOAL 5.1: Divert at least 40 percent of the volume of residential waste collected by City Sanitation from being landfilled by 2025 |   | 5.1.c.  | Create a community waste reduction campaign targeted at businesses and citizens  | 2020          |
| Waste                       | SAP   | GOAL 5.1: Divert at least 40 percent of the volume of residential waste collected by City Sanitation from being landfilled by 2026 |   | 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  | 2020          |
| 2021 Goals                  |       |  |   |         |  |               |
| Waste                       | SAP   | GOAL 5.1: Divert at least 40 percent of the volume of residential waste collected by City Sanitation from being landfilled by 2027 |   | 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  | 2021          |
| Waste                       | SAP   | GOAL 5.1: Divert at least 40 percent of the volume of residential waste collected by City Sanitation from being landfilled by 2028 |   | 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  | 2021          |
| 2022 Goals                  |       |  |   |         |  |               |
| Waste                       | SAP   | GOAL 5.1: Divert at least 40 percent of the volume of residential waste collected by City Sanitation from being landfilled by 2029 |   | 5.1.g.  | Create a composting program for both residential and commercial food waste   | 2022          |
| 2023 Goals                  |       |  |   |         |  |               |
| Waste                       | SAP   | GOAL 5.1: Divert at least 40 percent of the volume of residential waste collected by City Sanitation from being landfilled by 2030 |   | 5.1.h.  | Explore the long-term opportunity for a Materials Recovery Facility in Bloomington   | 2023          |
| Phase 1 (2021-2             | (023) |  |   |         |  |               |
| Waste<br>Management         | 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).              | 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.  | 1             |
| Waste<br>Management         | 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).              | 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.   | 1             |
| Waste<br>Management         | 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).              | 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.                               | 1             |
| Waste<br>Management         | CAP   | Goal WM 1 Increase landfill solid waste diversion by 30% of 2018 values (26,500 tons of waste reduction).                          | 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).           | 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. | 1             |

| Waste<br>Management | CAP   | Goal WM 1 Increase landfill solid waste diversion by 30% of 2018 values (26,500 tons of waste reduction). | 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). | WM1-B-2 | Conduct outreach to determine what assistance may be needed to increase recycling, organics collection, and composting.   | 1 |
|---------------------|-------|---|---|---------|---|---|
| Waste<br>Management | CAP   | Goal WM 1 Increase landfill solid waste diversion by 30% of 2018 values (26,500 tons of waste reduction). | Strategy WM 1-C: Increase diversion of potential recoverables by 33% of 2018 values   | 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 | 1 |
| Waste<br>Management | CAP   | Goal WM 1 Increase landfill solid waste diversion by 30% of 2018 values (26,500 tons of waste reduction). | Strategy WM 1-C: Increase diversion of potential recoverables by 33% of 2018 values   | 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.  | 1 |
| Waste<br>Management | CAP   | Goal WM 1 Increase landfill solid waste diversion by 30% of 2018 values (26,500 tons of waste reduction). | Strategy WM 1-D: Support waste reduction through policy and operational refinements.  | 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.   | 1 |
| Waste<br>Management | CAP   | Goal WM 1 Increase landfill solid waste diversion by 30% of 2018 values (26,500 tons of waste reduction). | Strategy WM 1-E: Expanded recycling and organics options for multi-family residents.  | 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 company and tenants, lack of knowledge of costs).  | 1 |
| Waste<br>Management | CAP   | Goal WM 1 Increase landfill solid waste diversion by 30% of 2018 values (26,500 tons of waste reduction). | Strategy WM 1-E: Expanded recycling and organics options for multi-family residents.  | 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.  | 1 |
| Waste<br>Management | CAP   | Goal WM 1 Increase landfill solid waste diversion by 30% of 2018 values (26,500 tons of waste reduction). | Strategy WM 1-E: Expanded recycling and organics options for multi-family residents.  | 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.  | 1 |
| Waste<br>Management | CAP   | 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.   | 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   | 1 |
| Phase 2 (2023-2     | 2026) |   |   |         |   |   |
| Waste<br>Management | 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).    | WM1-A-4 | Partner with Monroe County Waste District to promote drop-off of compostable material.  | 2 |
| Waste<br>Management | 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).    | WM1-A-5 | Increase voluntary participation in commercial food scrap collection by identifying businesses that face barriers to participation and providing direct outreach and assistance.  | 2 |
| Waste<br>Management | 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).    | WM1-A-6 | Establish an At-Home and Community Garden Composting program supporting the expansion of food waste diversion through at-home composting. Provide backyard composting workshops, tips, and resources  | 2 |
| Waste<br>Management | 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).    | WM1-A-7 | Based on results of the Food Scraps Bag pilot project, establish a policy or ordinance expanding or requiring in-trash food scrap composting based on results of pilot project.   | 2 |
| Waste<br>Management | 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).    | WM1-A-8 | Close the loop on organics recycling; initiate a Compost Soil Amendment pilot project for use of compost as a soil amendment for public and private construction projects.  | 2 |
| Waste<br>Management | CAP   | Goal WM 1 Increase landfill solid waste diversion by 30% of 2018 values (26,500 tons of waste reduction). | Strategy WM 1-C: Increase diversion of potential recoverables by 33% of 2018 values   | WM1-C-3 | Conduct a Phase 2 Waste-to-Energy Analysis to build on and proceed with further analysis of the waste-<br>to-energy potential at wastewater treatment facilities as outlined in the recommendations of the 2020<br>Phase 1 Waste-to-Energy Analysis. Phase 2 analysis should identify pilot project(s) and an<br>implementation schedule.   | 2 |
| Waste<br>Management | CAP   | Goal WM 1 Increase landfill solid waste diversion by 30% of 2018 values (26,500 tons of waste reduction). | Strategy WM 1-C: Increase diversion of potential recoverables by 33% of 2018 values   | WM1-C-4 | Establish a policy requiring the use of recycled asphalt, used roofing shingles, or other materials, particularly construction and demolition debris, in new streets  | 2 |
| Waste<br>Management | CAP   | Goal WM 1 Increase landfill solid waste diversion by 30% of 2018 values (26,500 tons of waste reduction). | Strategy WM 1-C: Increase diversion of potential recoverables by 33% of 2018 values   | WM1-C-5 | Explore partnership with clothing reuse non-profits and businesses and a textile specialized recycling company to create a Clothing Reuse and Recycling pilot project to explore the potential of zero waste textiles within the Cit  | 2 |
| Waste<br>Management | CAP   | Goal WM 1 Increase landfill solid waste diversion by 30% of 2018 values (26,500 tons of waste reduction). | Strategy WM 1-D: Support waste reduction through policy and operational refinements.  | WM1-D-2 | Study current best practices and most effective progressive Pay-As-You-Throw (PAYT) residential trash rates and implement a restructuring of City solid waste solid waste collection rates to promote solid waste diversion.  | 2 |
|                     |       | •   | •   |         | •   | • |

| Waste<br>Management | CAP  | Goal WM 1 Increase landfill solid waste diversion by 30% of 2018 values (26,500 tons of waste reduction).  | Strategy WM 1-D: Support waste reduction through policy and operational refinements.  | WM1-D-3  | Explore the creation of a Universal Zero Waste Ordinance, requiring all property owners to provide recycling and compost collection services and requiring businesses to use these services  | 2                                       |
|---------------------|------|--|---|----------|--|---|
| Waste<br>Management | CAP  | Goal WM 1 Increase landfill solid waste diversion by 30% of 2018 values (26,500 tons of waste reduction).  | Strategy WM 1-D: Support waste reduction through policy and operational refinements.  | WM1-D-4  | Increase recycling surcharge on landfill fees to develop more recycling programs.  | 2                                       |
| Waste<br>Management | CAP  | Goal WM 1 Increase landfill solid waste diversion by 30% of 2018 values (26,500 tons of waste reduction).  | Strategy WM 1-E: Expanded recycling and organics options for multi-family residents.  | WM1-E-4  | Developing a fiscal impact statement of expanding the organics and recycling program ordinance. Impact statement should compare implementation options such as offering multi-family residents opt-in pick up services, or an incremental implementation starting with smaller apartment complexes and gradually expanding to larger complexes.  | 2                                       |
| Waste<br>Management | CAP  | 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.   | WM2-A-2  | Collaborate with partners such as Bloomington Chamber of Commerce, Downtown Bloomington, community businesses, and Indiana University to create a recycling marketing campaign and branding and provide reduce/recycle marketing and signage at storefronts, in parking lots, at point-of-sale, on websites, in local papers, on TV, etc. Campaign to standardize information and communication on solid waste, recycling, and organics options. | 2                                       |
| Phase 3 (2026-2     | 030) |  |   |          |  |   |
| Waste<br>Management | 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).    | WM1-A-9  | Based on Compost Soil Amendment pilot project results create a policy encouraging or an ordinance requiring use of compost soil amendments for all projects meeting appropriate threshold as supported by the pilot project  | 3                                       |
| Waste<br>Management | CAP  | Goal WM 1 Increase landfill solid waste diversion by 30% of 2018 values (26,500 tons of waste reduction).  | 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). | WM1-B-3  | Incorporate criteria regarding recycled content and extended producer responsibility into procurement guidelines for City purchasing.  | 3                                       |
| Waste<br>Management | CAP  | Goal WM 1 Increase landfill solid waste diversion by 30% of 2018 values (26,500 tons of waste reduction).  | Strategy WM 1-C: Increase diversion of potential recoverables by 33% of 2018 values   | WM1-C-6  | Establish a policy or ordinance expanding or requiring textile reuse and recycling based on outcomes of the Clothing Reuse and Recycling pilot project.  | 3                                       |
| Waste<br>Management | CAP  | Goal WM 1 Increase landfill solid waste diversion by 30% of 2018 values (26,500 tons of waste reduction).  | Strategy WM 1-C: Increase diversion of potential recoverables by 33% of 2018 values   | WM1-C-7  | Explore options to support, influence and increase the preservation, reuse, repurposing and retrofit of existing structures to reduce demolition waste, preserve the embodied energy and materials, while avoiding the energy usage related to demolition.   | 3                                       |
| Waste<br>Management | CAP  | Goal WM 1 Increase landfill solid waste diversion by 30% of 2018 values (26,500 tons of waste reduction).  | Strategy WM 1-C: Increase diversion of potential recoverables by 33% of 2018 values   | WM1-C-8  | Continue to support collaborative consumption community projects, such as neighborhood compost projects, tool libraries, and repair cafes through mini-grant programs.   | 3                                       |
| Waste<br>Management | CAP  | Goal WM 1 Increase landfill solid waste diversion by 30% of 2018 values (26,500 tons of waste reduction).  | Strategy WM 1-C: Increase diversion of potential recoverables by 33% of 2018 values   | WM1-C-9  | Provide event support for Fix It Fair at the Library and create a resource list for reuse.   | 3                                       |
| Waste<br>Management | CAP  | Goal WM 1 Increase landfill solid waste diversion by 30% of 2018 values (26,500 tons of waste reduction).  | Strategy WM 1-C: Increase diversion of potential recoverables by 33% of 2018 values   | WM1-C-10 | Research best practices for recycling hydrofluorocarbons (potent GHG used in refrigeration and air conditioning) and identify Hydrofluorocarbon Pilot Project to implement.  | 3                                       |
| Waste<br>Management | CAP  | Goal WM 1 Increase landfill solid waste diversion by 30% of 2018 values (26,500 tons of waste reduction).  | Strategy WM 1-C: Increase diversion of potential recoverables by 33% of 2018 values   | WM1-C-11 | Based on best practice research and the Hydrofluorocarbon Pilot Project, recommend city policy or ordinance modifications.   | 3                                       |
| Waste<br>Management | CAP  | Goal WM 1 Increase landfill solid waste diversion by 30% of 2018 values (26,500 tons of waste reduction).  | Strategy WM 1-D: Support waste reduction through policy and operational refinements.  | WM1-D-5  | Conduct an optimization study to increase the efficiency of City solid waste collections and transfer routes and implement findings.   | 3                                       |
| Waste<br>Management | CAP  | 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.   | WM2-A-3  | Coordinate with the Monroe County Community Schools to establish paths towards Zero Waste program. Program to include zero waste curricula and family content as well as zero waste strategies for school facilities.  | 3                                       |
| Category            | Plan | Goal   | Strategy  | Action   | Action Description   | Year/ Phase                             |
| Nater and Waste     |      |  |   |          |  | 111111111111111111111111111111111111111 |
| 2019 Goals          |      |  |   |          |  |   |
| Water               | SAP  | GOAL 6.1: Reduce Per Capita Daily Water Consumption<br>20 percent by 2023, relative to a baseline of 96.2 gallons in<br>2016                           |   | 6.1.a.   | Develop an enhanced public education campaign to encourage water conservation, with a focus on peak summer month water use   | 2019                                    |
| Water               | SAP  | GOAL 6.4: Increase the number of green infrastructure features in the Bloomington community to improve stormwater quality, compared to a 2019 baseline |   | 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  | 2019                                    |
| Water               | SAP  | GOAL 6.5: Decrease the number of impaired water bodies in Monroe County by 2023, compared to a baseline  |   | 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  | 2019                                    |
| vvatci              |      | number of 21 in 2016   |   |          |  |   |

| Water                                      | 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)           |  | 6.6.a. | Continue to be vigilant about grease and sewer inspections to prevent one-time overflow events   | 2019 |
|--|-------|--|--|--------|--|------|
| 2020 Goals                                 |       |  |  |        |  |      |
| Water                                      | SAP   | GOAL 6.1: Reduce Per Capita Daily Water Consumption 20 percent by 2023, relative to a baseline of 96.2 gallons in 2016                                 |  | 6.1.b. | Develop home leak detection repair program for lowincome individuals   | 2020 |
| Water                                      | SAP   | GOAL 6.1: Reduce Per Capita Daily Water Consumption 20 percent by 2023, relative to a baseline of 96.2 gallons in 2016                                 |  | 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  | 2020 |
| Water                                      | SAP   | GOAL 6.1: Reduce Per Capita Daily Water Consumption 20 percent by 2023, relative to a baseline of 96.2 gallons in 2016                                 |  | 6.1.d. | Review and update drought contingency policies in the event of future emergencies  | 2020 |
| Water                                      | SAP   | GOAL 6.3: Expand participation in City-led surface water quality programs, compared to a 2019 baseline   |  | 6.3.a. | Establish a 2019 participant baseline for participation in City-led water quality programs, such as the Hoosier RiverWatch and Adopt-a-Stream programs   | 2020 |
| Water                                      | SAP   | GOAL 6.3: Expand participation in City-led surface water quality programs, compared to a 2019 baseline   |  | 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   | 2020 |
| Water                                      | SAP   | GOAL 6.3: Expand participation in City-led surface water quality programs, compared to a 2019 baseline   |  | 6.3.c. | Sponsor promotional efforts aimed at increasing participation in these educational programs  | 2020 |
| Water                                      | SAP   | GOAL 6.4: Increase the number of green infrastructure features in the Bloomington community to improve stormwater quality, compared to a 2019 baseline |  | 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  | 2020 |
| Water                                      | SAP   | GOAL 6.4: Increase the number of green infrastructure features in the Bloomington community to improve stormwater quality, compared to 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   | 2020 |
| Water                                      | SAP   | GOAL 6.5: Decrease the number of impaired water bodies in Monroe County by 2023, compared to a baseline number of 21 in 2018                           |  | 6.5.c. | Develop UReport mechanism for reporting of illicit discharges and promote citizen reporting capability   | 2020 |
| Water                                      | SAP   | GOAL 6.5: Decrease the number of impaired water bodies in Monroe County by 2023, compared to a baseline number of 21 in 2019                           |  | 6.5.d. | Inventory and begin necessary infrastructure improvements to the stormwater system   | 2020 |
| Water                                      | 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)           |  | 6.6.b. | Invest in an Inflow and Infiltration Program to eliminate leaks in sewer mains   | 2020 |
| Water                                      | 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)           |  | 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   | 2020 |
| 2021 Goals                                 |       |  |  |        |  |      |
| Water                                      | SAP   | GOAL 6.1: Reduce Per Capita Daily Water Consumption<br>20 percent by 2023, relative to a baseline of 96.2 gallons in<br>2016                           |  | 6.1.e. | Establish rain sensor irrigation rebate program and provide information on appropriate sensor settings   | 2021 |
| Water                                      | SAP   | GOAL 6.1: Reduce Per Capita Daily Water Consumption 20 percent by 2023, relative to a baseline of 96.2 gallons in 2016                                 |  | 6.1.f. | Explore options for implementing water rates to encourage conservation   | 2021 |
| Water                                      | SAP   | GOAL 6.4: Increase the number of green infrastructure features in the Bloomington community to improve stormwater quality, compared to a 2019 baseline |  | 6.4.d. | Conduct rain garden, stormwater and green infrastructure tours   | 2021 |
| Water                                      | SAP   | GOAL 6.4: Increase the number of green infrastructure features in the Bloomington community to improve stormwater quality, compared to a 2019 baseline |  | 6.4.e. | Offer stormwater billing credits for residents who implement green infrastructure projects   | 2021 |
| 2023 Goals                                 |       |  |  |        |  |      |
| Water                                      | SAP   | GOAL 6.2: Participate in at least two partnerships designed to improve surface water quality in Monroe County by 2023                                  |  | 6.2.a. | Pursue Clean Water Act 319 grants for efforts to clean and protect Bloomington area watersheds through collaborations with community partners  | 2023 |
| Water                                      | SAP   | GOAL 6.2: Participate in at least two partnerships designed to improve surface water quality in Monroe County by 2023                                  |  | 6.2.b. | Begin implementation of approved Clean Water Act 319 programs and monitor progress by assessing populations of pollution intolerant invertebrates  | 2023 |
| Water                                      | 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)           |  | 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  | 2023 |
|  | 2023) | · ·  |  |        |  |      |
| Phase 1 (2021-2                            |       |  |  |        | Facilitate and estimate and est |      |
| Phase 1 (2021-2<br>Water and<br>Wastewater | CAP   | Goal W 1 Decrease potable water consumption by 3% of 2018 values.  | Strategy W 1-A: Promote increased water conservation citywide. | 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.  | 1    |

| Water and<br>Wastewater | CAP   | Goal W 1 Decrease potable water consumption by 3% of 2018 values.  | Strategy W 1-B: Maintain and update city plans and standards in support water conservation goals.                       | 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). | 1 |
|-------------------------|-------|--|---|--------|--|---|
| Water and<br>Wastewater | CAP   | Goal W 2 Maintain source and drinking water quality through climate related challenges.                          | Strategy W 2-A: Improve water quality protections and awareness.  | W2-A-1 | Strengthen riparian/stream/wetland protection in local ordinances and regulations where feasible.  | 1 |
| Water and<br>Wastewater | 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. | 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.   | 1 |
| Water and<br>Wastewater | CAP   | Goal W 3 Reduce energy use associated with treating and transporting water and wastewater by 10% of 2018 values. | Strategy W 3-B: Capture and use of wastewater energy potential.   | W3-B-1 | Research into biogas opportunities at the City's wastewater treatment plant and explore opportunities for renewable natural gas development capacity.  | 1 |
| Water and<br>Wastewater | CAP   | Goal W 4 Mitigate flood hazards and impacts.   | Strategy W 4-A: Update design standards and plans for flood mitigation.   | W4-A-1 | Review and update public infrastructure design standards and the City's Stormwater Management Plan to meet climate change projections for Bloomington  | 1 |
| Water and<br>Wastewater | CAP   | Goal W 4 Mitigate flood hazards and impacts.   | Strategy W 4-A: Update design standards and plans for flood mitigation.   | W4-A-2 | Perform a flood risk assessment using historical data and future precipitation forecasts to identify areas and critical infrastructure vulnerable to flooding  | 1 |
| Water and<br>Wastewater | CAP   | Goal W 4 Mitigate flood hazards and impacts.   | Strategy W 4-B: Increase green infrastructure capacities citywide.  | W4-B-1 | Promote native landscaping to help restore and conserve natural habitats and avoid turf grass.   | 1 |
| Water and<br>Wastewater | CAP   | Goal W 4 Mitigate flood hazards and impacts.   | Strategy W 4-B: Increase green infrastructure capacities citywide.  | W4-B-2 | Encourage use of rain gardens at public agency sites as well as commercial and residential sites.  | 1 |
| Water and<br>Wastewater | CAP   | Goal W 4 Mitigate flood hazards and impacts.   | Strategy W 4-B: Increase green infrastructure capacities citywide.  | W4-B-3 | Add stormwater absorption features, such as bioswales, rain gardens, and pervious pavement systems to City-owned space.  | 1 |
| hase 2 (2023-2          | 2026) |  |   |        |  |   |
| Water and<br>Wastewater | CAP   | Goal W 1 Decrease potable water consumption by 3% of 2018 values.  | Strategy W 1-A: Promote increased water conservation citywide.  | W1-A-3 | Implement a policy to require installation of rainwater collection systems and WaterSense water efficient fixtures and appliances at all City facility projects and all projects receiving \$50,000 or more in City tax abatement, financing or funding. Provide information and technical assistance to projects as needed.   | 2 |
| Water and<br>Wastewater | CAP   | Goal W 1 Decrease potable water consumption by 3% of 2018 values.  | Strategy W 1-A: Promote increased water conservation citywide.  | W1-A-4 | Expand water conservation programs that focus on outdoor irrigation, which may also support better identification of water-related carbon sequestering opportunities such as using soil amendments, native grasses and proper tree watering  | 2 |
| Water and<br>Wastewater | CAP   | Goal W 1 Decrease potable water consumption by 3% of 2018 values.  | Strategy W 1-B: Maintain and update<br>city plans and standards in support<br>water conservation goals.                 | W1-B-2 | Continue to plant more native and drought-resistant vegetation.  | 2 |
| Water and<br>Wastewater | CAP   | Goal W 1 Decrease potable water consumption by 3% of 2018 values.  | Strategy W 1-B: Maintain and update<br>city plans and standards in support<br>water conservation goals.                 | W1-B-3 | Encourage developers to utilize the Sustainable Development Incentive and provide low impact development stormwater management by installing permanent infiltration or collection features (e.g., swale, culvert outfall, rainwater cistern) that can retain 100 percent of the runoff.  | 2 |
| Water and<br>Wastewater | CAP   | Goal W 2 Maintain source and drinking water quality through climate related challenges.                          | Strategy W 2-A: Improve water quality protections and awareness.  | W2-A-2 | Develop educational materials covering the link between water resources and climate change.  | 2 |
| Water and<br>Wastewater | 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. | W3-A-2 | Identify and support opportunities for residents and businesses - particularly those with significant hot water loads such as laundromats and hospitals - to electrify water heaters or install solar thermal technology.  | 2 |
| Water and<br>Wastewater | CAP   | Goal W 3 Reduce energy use associated with treating and transporting water and wastewater by 10% of 2018 values. | Strategy W 3-B: Capture and use of wastewater energy potential.   | W3-B-2 | Following completion of study for retaining City wastewater treatment plant produced Renewable Natural Gas (RNG) and kWh for City heating and electrical needs implement recommendations of study.   | 2 |
| Water and<br>Wastewater | CAP   | Goal W 4 Mitigate flood hazards and impacts.   | Strategy W 4-A: Update design standards and plans for flood mitigation.   | W4-A-3 | Continue to restore and maintain creeks to accommodate increased rain events. Review standards and ensure they include projected precipitation levels due to climate change. Creek restoration can reduce the likelihood and magnitude of flooding and support healthy habitat   | 2 |
| Water and<br>Wastewater | CAP   | Goal W 4 Mitigate flood hazards and impacts.   | Strategy W 4-A: Update design standards and plans for flood mitigation.   | W4-A-4 | Determine stormwater volume requirements meeting anticipated future storm levels and identify stormwater management systems and infrastructure not capable of meeting projected needs. Prioritize upgrades required and implement. Integrate upgrades into already scheduled maintenance programs and budgets  | 2 |
| Water and<br>Wastewater | CAP   | Goal W 4 Mitigate flood hazards and impacts.   | Strategy W 4-A: Update design standards and plans for flood mitigation.   | W4-A-5 | Expand inclusion of green infrastructure in City's Stormwater Management Plan. Identify specific types of green infrastructure to implement including: parking lots, alleys, parks, vacant lots, parkways, and grading near sidewalks. In addition, identify property owned by other public entities that have a high potential for improved ecological management to improve stormwater management functions.   | 2 |
| Water and<br>Wastewater | CAP   | Goal W 4 Mitigate flood hazards and impacts.   | Strategy W 4-A: Update design standards and plans for flood mitigation.   | W4-A-6 | Modify water utility bills to provide education to residents on what actions they can take to reduce their risk to extreme precipitation events and flash flooding. Develop an information HUB with tools and resources. (e.g. https://www.cnt.org/tools/myrainready-home-assessment-tool)   | 2 |
| Water and<br>Wastewater | CAP   | Goal W 4 Mitigate flood hazards and impacts.   | Strategy W 4-B: Increase green infrastructure capacities citywide.  | W4-B-4 | Prioritize restoration types and areas to increase and improve stream and wetland protection and restoration; develop funding strategy.  | 2 |
| Water and<br>Wastewater | CAP   | Goal W 4 Mitigate flood hazards and impacts.   | Strategy W 4-B: Increase green infrastructure capacities citywide.  | W4-B-5 | Leverage resources to support neighborhood green infrastructure grants and ongoing maintenance   | 2 |
| Water and<br>Wastewater | CAP   | Goal W 4 Mitigate flood hazards and impacts.   | Strategy W 4-B: Increase green infrastructure capacities citywide.  | W4-B-6 | Incentivize and prioritize the development of "green infrastructure" such as parks, wetlands, riparian and wildlife corridors, natural drainage-ways, and low-impact development. Research green infrastructure implementation and long-term viability in local environment.   | 2 |

| Water and<br>Wastewater     | CAP           | Goal W 1 Decrease potable water consumption by 3% of 2018 values.   | Strategy W 1-A: Promote increased water conservation citywide.          | W1-A-5 | Expand water conservation programs that focus on outdoor irrigation, which may also support better identification of water-related carbon sequestering opportunities such as using soil amendments, native grasses and proper tree watering.        | 3           |
|-----------------------------|---------------|---|---|--------|---|-------------|
| Water and<br>Wastewater     | CAP           | Goal W 1 Decrease potable water consumption by 3% of 2018 values.   | Strategy W 1-A: Promote increased water conservation citywide.          | W1-A-6 | Expand water conservation outreach and incentive programs for residents and businesses.   | 3           |
| Water and<br>Wastewater     | CAP           | Goal W 2 Maintain source and drinking water quality through climate related challenges.   | Strategy W 2-A: Improve water quality protections and awareness.        | W2-A-3 | Increase stream buffer requirements to provide additional flood water storage and minimize property damage due to erosion and flooding  | 3           |
| Water and Wastewater        | CAP           | Goal W 4 Mitigate flood hazards and impacts.  | Strategy W 4-A: Update design standards and plans for flood mitigation. | W4-A-7 | Build more permeable parking lots and driveways and use more recycled materials with concrete.  | 3           |
| Water and<br>Wastewater     | CAP           | Goal W 4 Mitigate flood hazards and impacts.  | Strategy W 4-B: Increase green infrastructure capacities citywide.      | W4-B-7 | Increase the number of public and private use of raingarden and other infiltration projects   | 3           |
|                             |               |   |   |        |   |             |
| Category                    | Plan          | Goal  | Strategy  | Action | Action Description  | Year/ Phase |
| Local Food and              | d Agriculture | )   |   |        |   |             |
| 2019 Goals                  |               |   |   |        |   |             |
| Local Food &<br>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      |   | 4.1.a. | Develop an annual community survey designed to evaluate changes in healthy food access over time  | 2019        |
| Local Food &<br>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      |   | 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.)   | 2019        |
| Local Food &<br>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      |   | 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   | 2019        |
| Local Food &<br>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      |   | 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 | 2019        |
| Local Food &<br>Agriculture | SAP           | GOAL 4.2: Increase the area of food gardens within the community, compared to a 2019 baseline   |   | 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   | 2019        |
| Local Food &<br>Agriculture | SAP           | GOAL 4.2: Increase the area of food gardens within the community, compared to a 2019 baseline   |   | 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)               | 2019        |
| Local Food &<br>Agriculture | 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 |   | 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  | 2019        |
| Local Food &<br>Agriculture | 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 |   | 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  | 2019        |
| Local Food &<br>Agriculture | 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 |   | 4.3.c. | Host a community meeting with institutional buyers and local growers to identify challenges and opportunities for collaboration   | 2019        |
| 2020 Goals                  |               |   |   |        |   |             |
| 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      |   | 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   | 2020        |
| Local Food &<br>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      |   | 4.1.f. | Implement the Stock Healthy, Shop Healthy community program to improve access to healthy, affordable foods by working with small food retailers   | 2020        |
| Local Food &<br>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      |   | 4.1.g. | Establish a refrigerated food truck program to transport healthy foods to food deserts  | 2020        |
| Local Food &<br>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      |   | 4.1.h. | Collaborate with convenience stores to expand healthy food offerings  | 2020        |

| Local Food &<br>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      |  | 4.1.i.  | Recruit organizations located in/near food deserts to host community gardens and/or pop-up farm stands  | 2020 |
|-----------------------------|-------|---|--|---------|---|------|
| Local Food &<br>Agriculture | SAP   | GOAL 4.2: Increase the area of food gardens within the community, compared to a 2019 baseline   |  | 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  | 2020 |
| Local Food &<br>Agriculture | SAP   | GOAL 4.2: Increase the area of food gardens within the community, compared to a 2019 baseline   |  | 4.2.d.  | Add 39 raised garden beds at Switchyard Park  | 2020 |
| Local Food &<br>Agriculture | SAP   | GOAL 4.2: Increase the area of food gardens within the community, compared to a 2019 baseline   |  | 4.2.e.  | Place a garden in all committed elementary schools and other organizations and provide consultation on establishment and maintenance  | 2020 |
| Local Food &<br>Agriculture | SAP   | GOAL 4.2: Increase the area of food gardens within the community, compared to a 2019 baseline   |  | 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   | 202  |
| _ocal Food &<br>Agriculture | 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 |  | 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   | 202  |
| Local Food &<br>Agriculture | 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 |  | 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  | 202  |
| 2021 Goals                  |       |   |  |         |   |      |
| Local Food &<br>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      |  | 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   | 202  |
| Local Food &<br>Agriculture | SAP   | GOAL 4.2: Increase the area of food gardens within the community, compared to a 2019 baseline   |  | 4.2.g.  | Facilitate a guided tour of farms and gardens within city limits to inspire and encourage acceptance of vegetative alternative practices  | 202  |
| hase 1 (2021-2              | 2023) |   |  |         |   |      |
| ocal Food &<br>Agriculture  | CAP   | Goal FA1 Increase food and nutrition security citywide.   | Strategy FA 1-A: Address financial food insecurity.  | 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.   | 1    |
| Local Food &<br>Agriculture | CAP   | Goal FA 1 Increase food and nutrition security citywide.  | Strategy FA 1-B: Improve food access.  | FA1-B-1 | Conduct a detailed Food Security Assessment to determine food insecurity conditions within the City,<br>areas with limited access to full service grocery stores and markets (particularly within areas of higher<br>vulnerable populations), identify areas within the City for improvement, and establish detailed strategies<br>to increase food security within City.   | 1    |
| Local Food &<br>Agriculture | CAP   | Goal FA 1 Increase food and nutrition security citywide.  | Strategy FA 1-B: Improve food access.  | FA1-B-2 | Support senior programs that involve both food and community such as volunteering or donating to local charities  | 1    |
| Local Food &<br>Agriculture | CAP   | Goal FA 1 Increase food and nutrition security citywide.  | Strategy FA 1-B: Improve food access.  | FA1-B-3 | Collaborate with convenience stores and food pantries to incentivize the purchase and distribution of affordable, fresh foods.  | 1    |
| Local Food &<br>Agriculture | CAP   | Goal FA 2 Increase local agricultural resilience to climate shocks.   | Strategy FA 2-A: Provide information and promote climate responsive agriculture practices. | 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  | 1    |
| Local Food &<br>Agriculture | CAP   | Goal FA 2 Increase local agricultural resilience to climate shocks.   | Strategy FA 2-B: Support climate resilient agriculture through City plans and programs.    | 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 prioritizes. 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. | 1    |
| Local Food &<br>Agriculture | CAP   | Goal FA 3 Increase and stabilize local food market.   | Strategy FA 3-A: Increase local food supply.   | 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   | 1    |
| Local Food &<br>Agriculture | CAP   | Goal FA 3 Increase and stabilize local food market.   | Strategy FA 3-A: Increase local food supply.   | 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.  | 1    |
| Local Food &<br>Agriculture | CAP   | Goal FA 3 Increase and stabilize local food market.   | Strategy FA 3-A: Increase local food supply.   | 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.   | 1    |
| Local Food &<br>Agriculture | CAP   | Goal FA 3 Increase and stabilize local food market.   | Strategy FA 3-B: Strengthen demand for local foods.  | 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  | 1    |

| Local Food &<br>Agriculture | CAP       | Goal FA 1 Increase food and nutrition security citywide.   | Strategy FA 1-A: Address financial food insecurity.  | FA1-A-2 | Continue to provide enrollment assistance for participation in the Supplemental Nutrition Assistance Program (SNAP), the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) Program and other food assistance programs, as well as supporting local initiatives addressing financial food insecurity.   | 2           |
|-----------------------------|-----------|--|--|---------|---|-------------|
| Local Food &<br>Agriculture | CAP       | Goal FA 1 Increase food and nutrition security citywide.   | Strategy FA 1-A: Address financial food insecurity.  | FA1-A-3 | Work regionally to support and facilitate food donation programs. Food donation programs reduce the amount of healthy, safe food that goes to waste and redirects it to those in need.  | 2           |
| Local Food &<br>Agriculture | CAP       | Goal FA 1 Increase food and nutrition security citywide.   | Strategy FA 1-B: Improve food access.  | FA1-B-4 | Develop an emergency food plan that includes a food needs assessment, scenarios for provisioning necessary food supplies during a range of anticipated emergencies, and a distribution and public communication plan that takes into account those most at risk for food insecurity. Work with local retailers, producers, and warehouses to implement food provisioning scenarios.   | 2           |
| Local Food &<br>Agriculture | CAP       | Goal FA 1 Increase food and nutrition security citywide.   | Strategy FA 1-B: Improve food access.  | FA1-B-5 | Improve the availability of culturally appropriate food accessible to the City's populations of color, religiously diverse, and limited English speakers. Explore opportunities to expand local development of these goods through engagement with local food producers and promote information on locations and price ranges of uncommon culturally important produce and food products.   | 2           |
| Local Food &<br>Agriculture | CAP       | Goal FA 2 Increase local agricultural resilience to climate shocks.  | Strategy FA 2-A: Provide information<br>and promote climate responsive<br>agriculture practices. | FA2-A-2 | Develop and deliver educational materials for producers that will assist them in understanding the differences between normal weather fluctuations and long term climate change, as well as provide information on the agricultural crops, varieties, and methods most suitable for our area.   | 2           |
| Local Food &<br>Agriculture | CAP       | Goal FA 2 Increase local agricultural resilience to climate shocks.  | Strategy FA 2-B: Support climate resilient agriculture through City plans and programs.          | FA2-B-2 | Work with Bloomington Water Utility and community partners to determine the feasibility of offering rebates or other incentives to farmers for irrigation water management equipment, water storage, reclaimed water, and conservation tillage equipment that saves potable water.  | 2           |
| Local Food &<br>Agriculture | CAP       | Goal FA 3 Increase and stabilize local food market.  | Strategy FA 3-A: Increase local food supply.   | FA3-A-4 | Collaborate with Monroe and other nearby County (non-City of Bloomington) officials, residents, and communities to bolster (1) the region's food supply, (2) aggregation and processing abilities, and (3) distribution capacity for both urban and rural residents alike. Work through existing partnerships or develop a new collaborative that brings key stakeholders from the Indiana Uplands as well as Jackson, Bartholomew, Johnson, Morgan, and Putnam counties into conversation for broader regional planning on a resilient food system for the future. | 2           |
| Local Food &<br>Agriculture | CAP       | Goal FA 3 Increase and stabilize local food market.  | Strategy FA 3-A: Increase local food supply.   | FA3-A-5 | Support existing school and community gardens and provide opportunities to expand community growing spaces with a focus on youth, immigrant, and low-income residents.  | 2           |
| Local Food &<br>Agriculture | CAP       | Goal FA 3 Increase and stabilize local food market.  | Strategy FA 3-A: Increase local food supply.   | FA3-A-6 | Support efforts to identify and increase utilization of shared food system assets such as shared food storage space, community commercial kitchens, group purchasing of growing equipment such as backyard greenhouses or hoop houses, and public-private partnerships  | 2           |
| Local Food &<br>Agriculture | CAP       | Goal FA 3 Increase and stabilize local food market.  | Strategy FA 3-A: Increase local food supply.   | FA3-A-7 | Equitably promote educational opportunities for residents to gain skills in organic gardening, fruit production, food preservation and cooking and affordable, healthy eating.  | 2           |
| Local Food &<br>Agriculture | CAP       | Goal FA 3 Increase and stabilize local food market.  | Strategy FA 3-B: Strengthen demand for local foods.  | FA3-B-2 | Establish a policy to allow city facilities to be used as Community Supported Agriculture drop off sites and promote their use among local food producers and consumers.  | 2           |
| Local Food &<br>Agriculture | CAP       | Goal FA 3 Increase and stabilize local food market.  | Strategy FA 3-B: Strengthen demand for local foods.  | FA3-B-3 | Promote and expand public education campaigns to encourage purchasing and procuring locally grown and organic food at the individual and institutional level.   | 2           |
| hase 3 (2026-2              | 2030)     |  |  |         |   |             |
| Local Food &<br>Agriculture | CAP       | Goal FA 3 Increase and stabilize local food market.  | Strategy FA 3-A: Increase local food supply.   | FA3-A-8 | Develop entrepreneurial program for middle and high school parents to grow food and sell in marketplace.  | 3           |
| Local Food &<br>Agriculture | CAP       | Goal FA 3 Increase and stabilize local food market.  | Strategy FA 3-B: Strengthen demand for local foods.  | FA3-B-4 | Expand Farmers Markets (particularly year-round market opportunities), local food hubs and marketing of locally produced and organic foods. Efforts to focus on increased community equity and food security among at-risk populations.   | 3           |
| Category                    | Plan      | Goal   | Strategy   | Action  | Action Description  | Year/ Phase |
| Greenspace & E              | Ecosystem | Health   | -  |         |   |             |
| 2019 Goals                  |           |  |  |         |   |             |
| Ecosystem<br>Health         | SAP       | GOAL 7.1: Conserve greenspace and enhance 100 acres of habitat in priority areas surrounding Clear Creek, Griffy Lake, and Jackson Creek by 2023 |  | 7.1.a.  | Ensure consideration of smart growth principles in future land use decisions to preserve important green spaces   | 2019        |
| Ecosystem<br>Health         | SAP       | GOAL 7.2: Remove 100 acres of invasive plants on public lands and 100 acres on private lands by 2023   |  | 7.2.a.  | Begin mapping acreage of invasive species removal with Garmin system and report on Green Spots Website to track progress over time  | 2019        |
| 2020 Goals                  |           |  |  |         |   |             |
| Ecosystem<br>Health         | SAP       | GOAL 7.1: Conserve greenspace and enhance 100 acres of habitat in priority areas surrounding Clear Creek, Griffy Lake, and Jackson Creek by 2023 |  | 7.1.b.  | Establish a volunteer program to assist with habitat restoration plans on public and private properties   | 2020        |
| Ecosystem<br>Health         | SAP       | GOAL 7.2: Remove 100 acres of invasive plants on public lands and 100 acres on private lands by 2023   |  | 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   | 2020        |
| Ecosystem<br>Health         | SAP       | GOAL 7.2: Remove 100 acres of invasive plants on public lands and 100 acres on private lands by 2024   |  | 7.2.c.  | Include requirements for native plants in all future landscaping plans  | 2020        |
| Ecosystem<br>Health         | SAP       | GOAL 7.2: Remove 100 acres of invasive plants on public lands and 100 acres on private lands by 2025   |  | 7.2.d.  | Create native plants demonstration and education sites with plant details at Switchyard Park and/or other<br>City parks   | 2020        |
| Ecosystem<br>Health         | SAP       | GOAL 7.2: Remove 100 acres of invasive plants on public lands and 100 acres on private lands by 2026   |  | 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  | 2020        |
| Fcosystem                   |           | GOAL 7.2: Remove 100 acres of invasive plants on public  |  |         | Create an educational campaign on the most effective methods of deer management and deer-resistant  |             |

7.2.f.

Create an educational campaign on the most effective methods of deer management and deer-resistant

plants

2020

GOAL 7.2: Remove 100 acres of invasive plants on public lands and 100 acres on private lands by 2027

Ecosystem Health

SAP

| 2023 Goals                          |      |  |  |        |   |      |
|-------------------------------------|------|--|--|--------|---|------|
| Ecosystem<br>Health                 | SAP  | GOAL 7.1: Conserve greenspace and enhance 100 acres<br>of habitat in priority areas surrounding Clear Creek, Griffy<br>Lake, and Jackson Creek by 2023 |  | 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  | 2023 |
| Ecosystem<br>Health                 | SAP  | GOAL 7.1: Conserve greenspace and enhance 100 acres<br>of habitat in priority areas surrounding Clear Creek, Griffy<br>Lake, and Jackson Creek by 2023 |  | 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  | 2023 |
| Ecosystem<br>Health                 | SAP  | GOAL 7.2: Remove 100 acres of invasive plants on public lands and 100 acres on private lands by 2028   |  | 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   | 2023 |
| hase 1 (2021-20                     | 023) |  |  |        |   |      |
| Greenspace &<br>Ecosystem<br>Health | CAP  | Goal G 1 Increase quantity and quality of greenspace within the community.   | Strategy G 1-A: Establish city<br>greenspace plans integrating findings<br>and goals of Climate Action Plan.   | 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.  | 1    |
| Greenspace & Ecosystem Health       | CAP  | Goal G 1 Increase quantity and quality of greenspace within the community.   | Strategy G 1-B: Improve the connectivity and functionality of greenspaces within the city.                     | G1-B-1 | Enhance the connectivity of greenbelt and habitat corridors across the community, including identification and improvement of "pollinator corridors" and "wildlife corridors." See Bloomington Environmental Commission documentation on pollinator and wildlife corridors.   | 1    |
| Greenspace & Ecosystem Health       | CAP  | Goal G 2 Increase quantity and quality of climate adaptive native habitats.  | Strategy G 2-A: Create and expand<br>native habitat policies and<br>infrastructure.                            | G2-A-1 | Create a policy requiring the use of native plants in landscaping at City-owned properties unless a data-<br>driven case can be made that such use is not appropriate.  | 1    |
| Greenspace & Ecosystem Health       | CAP  | Goal G 2 Increase quantity and quality of climate adaptive native habitats.  | Strategy G 2-B: Increase the use of native species and pollinator restoration areas.                           | 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.   | 1    |
| Greenspace &<br>Ecosystem<br>Health | 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.            | 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 | 1    |
| Greenspace & Ecosystem Health       | CAP  | Goal G 3 Increase citywide tree canopy coverage by 3% of 2018 values.  | Strategy G 3-B: Support and empower community partners, businesses and residents in meeting tree canopy goals. | 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.   | 1    |
| Greenspace & Ecosystem Health       | CAP  | Goal G 4 Reduce stormwater and micro heat island impacts.  | Strategy G 4-A: Reduce impervious surfaces   | 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.  | 1    |
| Greenspace &<br>Ecosystem<br>Health | CAP  | Goal G 4 Reduce stormwater and micro heat island impacts.  | Strategy G 4-B: Increase water uptake capacity of greenspace.  | 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.   | 1    |
| Greenspace &<br>Ecosystem<br>Health | CAP  | Goal G 4 Reduce stormwater and micro heat island impacts.  | Strategy G 4-B: Increase water uptake capacity of greenspace.  | 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.  | 1    |
| hase 2 (2023-20                     | 026) |  |  |        |   |      |
| Greenspace &<br>Ecosystem<br>Health | CAP  | Goal G 1 Increase quantity and quality of greenspace within the community.   | Strategy G 1-A: Establish city<br>greenspace plans integrating findings<br>and goals of Climate Action Plan.   | G1-A-2 | Conduct a greenspace and preservation equity assessment to evaluate greenspace citywide and determine potential needs for expansion, purchase and preservation of greenspace based on quantified equity, environmental, economic benefits, and Return on Investment based on life cycle costs of greenspace property ownership. Coordinate assessment with findings of the Citywide Ground Cover and Heat Island Assessment and Urban Forest Management Plan.   | 2    |
| Greenspace & Ecosystem Health       | CAP  | Goal G 1 Increase quantity and quality of greenspace within the community.   | Strategy G 1-A: Establish city<br>greenspace plans integrating findings<br>and goals of Climate Action Plan.   | G1-A-3 | Develop an incentive and assistance program to support the conversion unused turn and impervious areas in the city to sustainable green space as outlined in the City's Land Conversion Opportunity Study   | 2    |
| Greenspace & Ecosystem Health       | CAP  | Goal G 1 Increase quantity and quality of greenspace within the community.   | Strategy G 1-B: Improve the connectivity and functionality of greenspaces within the city.                     | G1-B-2 | Expand and connect green spaces so they are welcoming and within 10 minute walking distance of all residents, especially in underserved communities where there is a high level of impervious surfaces.   | 2    |
| Greenspace & Ecosystem Health       | CAP  | Goal G 2 Increase quantity and quality of climate adaptive native habitats.  | Strategy G 2-A: Create and expand<br>native habitat policies and<br>infrastructure.                            | G2-A-2 | Establish and effectively manage native-habitat corridors along trails (Parks) and utility easement areas to restore and maintain landscape connectivity.   | 2    |
| Greenspace & Ecosystem Health       | CAP  | Goal G 2 Increase quantity and quality of climate adaptive native habitats.  | Strategy G 2-B: Increase the use of native species and pollinator restoration areas.                           | G2-B-2 | Increase use and promotion of "no mow areas" with plantings of appropriate heights to ensure safety and visibility along roads and parking lots   | 2    |

| Greenspace &<br>Ecosystem<br>Health | 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.            | G3-A-2  | Develop an Urban Forest Management Plan to establish objectives and best management practices for the Municipality's urban forest and to identify appropriate canopy cover goals and establish an implementation plan to meet ground cover and tree canopy goals by neighborhood/census tract based on the Citywide Ground Cover and Heat Island Assessment and develop species diversity goals for the City. Recommended species should prioritize drought and flood resistant varieties and varieties likely to be resistive to changing climate and USDA Hardiness zones for City (see appendix 2 of City of Bloomington Climate Risk and Vulnerability Assessment). Species recommendation list to be distributed to and promote among residents, businesses, and contractors within the City. | 2 |
|-------------------------------------|------|---|--|---------|--|---|
| Greenspace &<br>Ecosystem<br>Health | CAP  | Goal G 3 Increase citywide tree canopy coverage by 3% of 2018 values.       | Strategy G 3-B: Support and empower community partners, businesses and residents in meeting tree canopy goals. | G3-B-2  | Develop educational and informational resources providing information on beneficial and climate adaptive tree species, "carbon gardening" strategies for ornamental gardens, and produce gardens, tree profile rebuilding, elimination of synthetic fertilizer and pesticide use, high mow deck settings, use of biochar amendments, polyculture lawn mixture and other beneficial greenspace practices included in this CAP.  | 2 |
| Greenspace &<br>Ecosystem<br>Health | CAP  | Goal G 3 Increase citywide tree canopy coverage by 3% of 2018 values.       | Strategy G 3-B: Support and empower community partners, businesses and residents in meeting tree canopy goals. | G3-B-3  | Create a communication campaign and educational content to increase opportunities for residents to learn about and take care of trees.   | 2 |
| Greenspace &<br>Ecosystem<br>Health | CAP  | Goal G 4 Reduce stormwater and micro heat island impacts.                   | Strategy G 4-A: Reduce impervious surfaces   | G4-A-2  | Use green infrastructure such as bioswales, permeable pavement, other pervious surfaces to reduce flood risk and minimize sediment entry into creeks from trails and roads.  | 2 |
| Greenspace &<br>Ecosystem<br>Health | CAP  | Goal G 4 Reduce stormwater and micro heat island impacts.                   | Strategy G 4-B: Increase water uptake capacity of greenspace.  | G4-B-3  | Explore revegetation, tree preservation planting and maintenance, depaving and porous pavement, and green infrastructure like bioswales ecoroofs and site development performance standards in support of the City's Citywide Ground Cover and Heat Island Assessment, Land Conversion Opportunity Study, and Urban Forest Management Plan.  | 2 |
| Greenspace &<br>Ecosystem<br>Health | CAP  | Goal G 4 Reduce stormwater and micro heat island impacts.                   | Strategy G 4-B: Increase water uptake capacity of greenspace.  | G4-B-4  | Keep natural resource areas, especially urban streams, cooler by increasing the width of vegetated areas along streams and wetlands and maintaining tree canopy.   | 2 |
| Greenspace &<br>Ecosystem<br>Health | CAP  | Goal G 4 Reduce stormwater and micro heat island impacts.                   | Strategy G 4-B: Increase water uptake capacity of greenspace.  | G4-B-5  | Transition maintenance of all city owned properties to Carbon Gardening practices including elimination of synthetic fertilizer and pesticide use, high mow deck settings, use of biochar amendments, and polyculture lawn mixture.  | 2 |
| Phase 3 (2026-2                     | 030) |   |  |         |  |   |
| Greenspace &<br>Ecosystem<br>Health | CAP  | Goal G 1 Increase quantity and quality of greenspace within the community.  | Strategy G 1-B: Improve the connectivity and functionality of greenspaces within the city.                     | G1-B-3  | Improve the ecological functionality of and resiliency of parks and open space through green infrastructure, best practices for stormwater management, and increased plant diversity and pollinator-friendly habitat   | 3 |
| Greenspace &<br>Ecosystem<br>Health | CAP  | Goal G 2 Increase quantity and quality of climate adaptive native habitats. | Strategy G 2-A: Create and expand<br>native habitat policies and<br>infrastructure.                            | G2-A-3  | Support seed banks to address shifts in habitats, microclimates, bioclimatic envelopes.  | 3 |
| Greenspace &<br>Ecosystem<br>Health | CAP  | Goal G 2 Increase quantity and quality of climate adaptive native habitats. | Strategy G 2-B: Increase the use of native species and pollinator restoration areas.                           | G2-B-3  | Promote "landscaping for absorption" practices for water prone residential and commercial landscapes.  Strategies include native moisture tolerant perennial plantings and shrubs  | 3 |
| Greenspace &<br>Ecosystem<br>Health | 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.            | G3-A-3  | Continue to prioritize tree planting and maintenance on public property.   | 3 |
| Greenspace &<br>Ecosystem<br>Health | 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.            | G3-A-4  | Enhance street scape plantings and tree canopies, especially in areas of high traffic volumes  | 3 |
| Greenspace &<br>Ecosystem<br>Health | CAP  | Goal G 3 Increase citywide tree canopy coverage by 3% of 2018 values.       | Strategy G 3-B: Support and empower community partners, businesses and residents in meeting tree canopy goals. | G3-B-4  | Plant shade trees to limit the need for indoor cooling and reduce temperatures at parks, playgrounds, and other outdoor spaces. Collaborate with School District to include school properties.   | 3 |
|                                     |      |   |  |         |  |   |
| Climate Econom                      | ıy   |   |  |         |  |   |
| Phase 1 (2021-20                    | 023) |   |  |         |  |   |
| Climate<br>Economy                  | CAP  | Goal CE 1 Build marketplace climate resilience.                             | Strategy CE 1-A: Evaluate climate risks to businesses.   | 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.  | 1 |
| Climate<br>Economy                  | CAP  | Goal CE 1 Build marketplace climate resilience.                             | Strategy CE 1-B: Accelerate the transition to a carbon free local economy.                                     | CE1-B-1 | Work with local unions and businesses to ensure that apprenticeship program includes solar training.   | 1 |
| Climate<br>Economy                  | CAP  | Goal CE 1 Build marketplace climate resilience.                             | Strategy CE 1-B: Accelerate the transition to a carbon free local economy.                                     | 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.  | 1 |
|                                     |      |   |  |         | Explore supporting local low income solar installations through the development of a local SREC market   |   |

|                    | _     |   |  |         |   |   |
|--------------------|-------|---|--|---------|---|---|
| Climate<br>Economy | 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.                       | 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  | 1 |
| Climate<br>Economy | CAP   | Goal CE 2 Attract, create, and support businesses that are committed to sustainability and climate goals. | Strategy CE 2-B: Support Climate<br>Economy economic development and<br>new business creation. | 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 the Ivy Tech Community College.  | 1 |
| Climate<br>Economy | CAP   | Goal CE 2 Attract, create, and support businesses that are committed to sustainability and climate goals. | Strategy CE 2-B: Support Climate<br>Economy economic development and<br>new business creation. | 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  | 1 |
| Climate<br>Economy | CAP   | Goal CE 2 Attract, create, and support businesses that are committed to sustainability and climate goals. | Strategy CE 2-B: Support Climate<br>Economy economic development and<br>new business creation. | 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.                             | 1 |
| Climate<br>Economy | CAP   | Goal CE 3 Develop new mechanisms for financing City climate action plan implementation.                   | Strategy CE 3-A: Leverage existing financing pathways.   | 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   | 1 |
| Climate<br>Economy | CAP   | Goal CE 3 Develop new mechanisms for financing City climate action plan implementation.                   | Strategy CE 3-A: Leverage existing financing pathways.   | CE3-A-2 | Establish a policy that designates City Electric and Natural Gas Franchise Fee Income as funding source for Climate Initiatives.  | 1 |
| Climate<br>Economy | CAP   | Goal CE 3 Develop new mechanisms for financing City climate action plan implementation.                   | Strategy CE 3-B: Develop new financing pathways.   | 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.   | 1 |
| Climate<br>Economy | CAP   | Goal CE 3 Develop new mechanisms for financing City climate action plan implementation.                   | Strategy CE 3-B: Develop new financing pathways.   | 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 increase the community's equity | 1 |
| hase 2 (2023-2     | 2026) |   |  |         |   |   |
| Climate<br>Economy | CAP   | Goal CE 1 Build marketplace climate resilience.   | Strategy CE 1-A: Evaluate climate risks to businesses.   | CE1-A-2 | Conduct a study to Identify economic opportunities possible through the successful implementation of the CAP plan and achievement of its goals, especially those which can provide opportunity for the city's vulnerable populations.   | 2 |
| Climate<br>Economy | CAP   | Goal CE 1 Build marketplace climate resilience.   | Strategy CE 1-A: Evaluate climate risks to businesses.   | CE1-A-3 | Strengthen public-private economic communications in support of climate resilience, climate economic opportunities, and the goals of this CAP. Effort should focus particularly on communications with disadvantaged group businesses (minority-owned, veteran owned, economically disadvantaged, etc.), and small businesses.                                    | 2 |
| Climate<br>Economy | CAP   | Goal CE 1 Build marketplace climate resilience.   | Strategy CE 1-A: Evaluate climate risks to businesses.   | CE1-A-4 | Collaborate with local and regional partners including the County, and Indiana University to establish a technical assistance or Climate Resilient Business concierge service and to work with businesses to assess their climate change vulnerability and plan for the future.   | 2 |
| Climate<br>Economy | CAP   | Goal CE 1 Build marketplace climate resilience.   | Strategy CE 1-B: Accelerate the transition to a carbon free local economy.                     | CE1-B-4 | Provide assistance vetting contractors, offering energy, waste, and water audits, and EV readiness assessments to local businesses.   | 2 |
| Climate<br>Economy | CAP   | Goal CE 1 Build marketplace climate resilience.   | Strategy CE 1-B: Accelerate the transition to a carbon free local economy.                     | CE1-B-5 | Promote Bloomington as an environmentally friendly destination by highlighting the businesses that are taking steps to reduce resource consumption.   | 2 |
| Climate<br>Economy | 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.                       | CE2-A-2 | Develop job training programs focused on building resiliency- solar construction, weatherization, etc. Potential example program: Colorado solar training program. Potential partners: Solar For All, Ivy Tech Community College and local solar installers. Coordinate with the City of Bloomington's Recover Forward program.                                   | 2 |
| Climate<br>Economy | 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.                       | CE2-A-3 | Develop specific programs to train residents of low and middle income communities for jobs in the green economy. Coordinate with Work One, Department of Workforce Development, Good Will Excel Center, Hoosier Hills Career Center, Ivy Tech Community College, and Regional Opportunities Initiative.   | 2 |
| Climate<br>Economy | CAP   | Goal CE 2 Attract, create, and support businesses that are committed to sustainability and climate goals. | Strategy CE 2-B: Support Climate<br>Economy economic development and<br>new business creation. | CE2-B-4 | Explore opportunities to broaden the City's economic base with diversification initiatives, such as targeting the development of emerging clusters or industries that (a) build on the region's unique assets and competitive strengths; and (b) provide stability during downturns that disproportionately impact any single cluster or industry                 | 2 |
| Climate<br>Economy | CAP   | Goal CE 2 Attract, create, and support businesses that are committed to sustainability and climate goals. | Strategy CE 2-B: Support Climate<br>Economy economic development and<br>new business creation. | CE2-B-5 | Focus business development efforts on businesses that have lower impacts on natural resources.  | 2 |
| Climate<br>Economy | CAP   | Goal CE 2 Attract, create, and support businesses that are committed to sustainability and climate goals. | Strategy CE 2-B: Support Climate<br>Economy economic development and<br>new business creation. | CE2-B-6 | Leverage city policy, purchasing, and regulation, and deepen local and regional partnerships including Indiana University to promote local research, development, and production of green technology and products   | 2 |
| Climate<br>Economy | CAP   | Goal CE 2 Attract, create, and support businesses that are committed to sustainability and climate goals. | Strategy CE 2-B: Support Climate<br>Economy economic development and<br>new business creation. | CE2-B-7 | Establish a policy to prioritize use of local businesses for City financed energy efficiency and renewable energy projects, with special consideration given to businesses owned by women and minorities.   | 2 |
| Climate<br>Economy | CAP   | Goal CE 3 Develop new mechanisms for financing City climate action plan implementation.                   | Strategy CE 3-A: Leverage existing financing pathways.   | CE3-A-3 | Explore opportunities to utilize Tax increment Financing (TIF) to incentivize Mitigation and Adaptation actions. Options include the establishment of a Renewable Energy TIF district incentivizing on-site renewable energy utilization or a Net Zero TIF funding mechanism incentivizing high energy efficiency and Net Zero buildings                          | 2 |
| Climate<br>Economy | CAP   | Goal CE 3 Develop new mechanisms for financing City climate action plan implementation.                   | Strategy CE 3-B: Develop new financing pathways.   | CE3-A-6 | Explore Issuing "resilience bonds" that generate risk-reduction rebates from a city's catastrophe insurance premiums to pay for resilience projects, prioritizing projects with high resilience, GHG mitigation, and climate adaptation potential.  | 2 |
|                    |       |   |  |         |   |   |

| Phase 3 (2026-2    | 2030) |   |  |         |   |   |
|--------------------|-------|---|--|---------|---|---|
| Climate<br>Economy | CAP   | Goal CE 1 Build marketplace climate resilience.   | Strategy CE 1-A: Evaluate climate risks to businesses.   | CE1-A-5 | Support climate resilience of local economy by preparing water, road, utilities, and other public infrastructure for increased demands from climate change based on Bloomington Climate Risk and Vulnerability Assessment, Emergency Management Plan, and State climate change data and projections.  | 3 |
| Climate<br>Economy | 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.   | CE2-A-4 | Collaborate with the School District, local community colleges, unions, and employers to establish a Green Jobs apprenticeship and internship program and facilitate the hiring of graduates through the promotion and subsidized internship placement with local employers.  | 3 |
| Climate<br>Economy | CAP   | Goal CE 2 Attract, create, and support businesses that are committed to sustainability and climate goals. | Strategy CE 2-B: Support Climate<br>Economy economic development and<br>new business creation.   | CE2-B-8 | Consider climate change-related risks to local supply chains in implementation of the City's economic development strategy.   | 3 |
| Climate<br>Economy | CAP   | Goal CE 2 Attract, create, and support businesses that are committed to sustainability and climate goals. | Strategy CE 2-B: Support Climate<br>Economy economic development and<br>new business creation.   | CE2-B-9 | Work with community businesses to explore the creation of an incentivized "buy local" campaign to enhance resilience of small local businesses.   | 3 |
|                    |       |   |  |         |   |   |
| Health & Safety    |       |   |  |         |   |   |
| Phase 1 (2021-2    | 023)  |   |  |         |   |   |
| 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.  | HS1-A-1 | Ensure public safety staff are properly trained to recognize and respond to physical and behavioral signs of heat-related illness.  | 1 |
| 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.  | 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. | 1 |
| Health & Safety    | CAP   | Goal HS 1 Educate, engage, and empower the public for climate health and safety.                          | Strategy HS 1-B: Establish and expand public health communication campaigns.   | 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.   | 1 |
| Health & Safety    | CAP   | Goal HS 1 Educate, engage, and empower the public for climate health and safety.                          | Strategy HS 1-B: Establish and expand public health communication campaigns.   | 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   | 1 |
| Health & Safety    | CAP   | Goal HS 2 Prepare Bloomington for climate risks and impacts.  | Strategy HS 2-A: Strengthen community response capacity and support networks.  | 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).  | 1 |
| Health & Safety    | CAP   | Goal HS 2 Prepare Bloomington for climate risks and impacts.  | Strategy HS 2-B: Improve equity of climate adaptation measures.  | 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.   | 1 |
| Health & Safety    | 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. | 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.  | 1 |
| Health & Safety    | 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. | HS3-A-2 | Offer on-site and on-line flood assessments and readiness improvements to residents within flood and flash flood prone areas  | 1 |
| Health & Safety    | 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. | HS3-A-3 | Create a flood risk education campaign including development of an online education hub with information, tools and resources.  | 1 |
| Health & Safety    | CAP   | Goal HS 3 Respond to climate risks and impacts.   | Strategy HS 3-B: Establish a climate impacts mutual aid program.   | 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.   | 1 |
| Health & Safety    | CAP   | Goal HS 3 Respond to climate risks and impacts.   | Strategy HS 3-C: Establish and update plans to address climate risks and impacts.  | 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 clean up grants into plan.   | 1 |
| Phase 2 (2023-2    | 026)  |   |  |         |   |   |
| 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.  | HS1-A-3 | Provide guidance through resource material to social service providers so they are aware of best practices in treating client needs during an extreme heat event.   | 2 |
| Health & Safety    | CAP   | Goal HS 1 Educate, engage, and empower the public for climate health and safety.                          | Strategy HS 1-B: Establish and expand public health communication campaigns.   | HS1-B-3 | Expand visibility of the City Air Quality Index including particulate matter and pollen counts so that the public is aware of bad air quality days. Include strategies for coping with poor air quality days  | 2 |

| Health & Safety | CAP  | Goal HS 2 Prepare Bloomington for climate risks and impacts.                     | Strategy HS 2-A: Strengthen community response capacity and support networks.  | HS2-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. Emergency management should be equipped to address the possibility of multiple emergencies at the same time.  | 2 |
|-----------------|------|--|--|---------|---|---|
| Health & Safety | CAP  | Goal HS 2 Prepare Bloomington for climate risks and impacts.                     | Strategy HS 2-B: Improve equity of climate adaptation measures.  | HS2-B-2 | Ensure equitable implementation of grid resilience actions by partnering with high-risk neighborhoods and non-governmental organizations to develop resilience hubs—community facilities that offer power and other services during times of need. Stablish criteria to screen and select locations for community microgrids to support grid and community resilience.  | 2 |
| Health & Safety | CAP  | Goal HS 2 Prepare Bloomington for climate risks and impacts.                     | Strategy HS 2-B: Improve equity of climate adaptation measures.  | HS2-B-3 | Seek to reduce vulnerability to mold and other flood related impacts by providing mold awareness and mitigation assistance for residents within flood and flash flood prone sectors and for vulnerable populations and within multi-family housing. Assistance may include establishing mold inspections for rental properties and/or residences in flood or flash flood prone areas of the city.   | 2 |
| Health & Safety | 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. | HS3-A-4 | Integrate climate change impact awareness into outreach and systems supporting and interacting with homeless community members. Implement protocols for enhanced support and augmentation of shelters and food shelves during extreme weather events.   | 2 |
| Health & Safety | 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. | HS3-A-5 | Seek to reduce exposure to extreme heat through distribution of energy-efficient, air conditioning in vulnerable populations with a prioritization in areas of high micro heat island impacts as identified in City's Citywide Ground Cover and Heat Island Assessment.   | 2 |
| Health & Safety | 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. | HS3-A-6 | Improve the energy efficiency of homes, apartments and commercial buildings to keep interiors cool, improving the comfort and safety of occupants and reducing the need for summer air conditioning. Encourage the planting of trees and vegetation on the south and west sides of homes and buildings to reduce summer heat gain (mid-cost). Job creation opportunity.   | 2 |
| Health & Safety | 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. | HS3-A-7 | Collaborate with community partners to provide flood insurance education to home owners, particularly new home buyers and at-risk home owners. Education should include when insurance is recommended, purposes for flood insurance, and what is typically covered and not covered by insurance.  | 2 |
| Health & Safety | CAP  | Goal HS 3 Respond to climate risks and impacts.                                  | Strategy HS 3-B: Establish a climate impacts mutual aid program.   | HS3-B-2 | Organize a transportation-assistance program for individuals without access to vehicles. Explore partners such as Area 10 on Aging, Bloomington Transit, and local hospitals.   | 2 |
| Health & Safety | CAP  | Goal HS 3 Respond to climate risks and impacts.                                  | Strategy HS 3-B: Establish a climate impacts mutual aid program.   | HS3-B-3 | Educate the public about the health risks of higher temperatures, develop strategies to check on individuals at greatest risk, and make options for cooling widely accessible.  | 2 |
| Health & Safety | CAP  | Goal HS 3 Respond to climate risks and impacts.                                  | Strategy HS 3-C: Establish and update plans to address climate risks and impacts.  | HS3-C-2 | In alignment with the American Public Health Association Policy Number: 201711, City will engage County and State environmental offices and health departments and with the EPA regional office in assessing and remediating environmental justice concerns in Bloomington. Concerns to be assessed to include exposures to smog and toxic air pollutants and the disproportionate number of asthma cases among people of color. Assessment to prioritize review of exposures near public housing and schools in the vicinity of freeways, industrial facilities, and power plants. Impacts of land-use planning and infrastructure decisions on air pollution exposure to be reexamined. | 2 |
| Health & Safety | CAP  | Goal HS 3 Respond to climate risks and impacts.                                  | Strategy HS 3-C: Establish and update plans to address climate risks and impacts.  | HS3-C-3 | Collaborate with County to ensure Emergency Management Plans include current and projected climate change risks and hazards and prioritize and prepare for responses in the event of climate hazards and extreme weather events. See City of Bloomington Climate Risk and Vulnerability Assessment 2020   | 2 |
| Health & Safety | CAP  | Goal HS 3 Respond to climate risks and impacts.                                  | Strategy HS 3-C: Establish and update plans to address climate risks and impacts.  | HS3-C-4 | In collaboration with County, develop a comprehensive heat response plan that incorporates most current climate change impact projections and combines individual strategies into an integrated approach. Coordinate with County to Include Response Plan on County's Public Health Preparedness webpage  | 2 |
| Phase 3 (2026-2 | 030) |  |  |         |   |   |
| 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.  | HS1-A-4 | Give city and county elected officials and staff tools (e.g. webinar trainings on emergency preparedness, facilitation guides, and other materials in multiple languages) to have dialogues about emergency preparedness within neighborhoods and to create local resilience strategies such as an Adopt-A-Neighbor campaign or hosting an OEM CERT-like training session in their community  | 3 |
| Health & Safety | CAP  | Goal HS 1 Educate, engage, and empower the public for climate health and safety. | Strategy HS 1-B: Establish and expand public health communication campaigns.   | HS1-B-4 | Collaborate with County Health, school district, Indiana University, and local hospitals to establish a public communications campaign to build awareness of vector borne disease risks, avoidance, and actions. Campaign should be focused particularly on those most vulnerable to exposure.  | 3 |
| Health & Safety | CAP  | Goal HS 2 Prepare Bloomington for climate risks and impacts.                     | Strategy HS 2-A: Strengthen community response capacity and support networks.  | HS2-A-3 | Explore potential of developing an indoor air quality monitoring program. Program could include deploying a series of air quality monitoring stations at appropriately located public facilities, schools, senior living homes, group homes, and public housing facilities.   | 3 |
| Health & Safety | CAP  | Goal HS 2 Prepare Bloomington for climate risks and impacts.                     | Strategy HS 2-B: Improve equity of climate adaptation measures.  | HS2-B-4 | Collaborate with County to establish/expand support of climate and extreme weather safe working conditions, extreme heat and heat stress education and general worker safety for individuals and jobs vulnerable to high heat.  | 3 |
|                 |      |  |  |         |   |   |