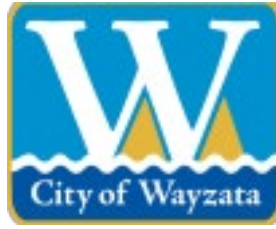


ENERGY AND ENVIRONMENT COMMITTEE

Tuesday, October 29, 2024 5:30 PM – 7:00 PM

**Wayzata City Hall
600 Rice Street East
Wayzata, MN 55391**

1. Roll Call
2. Approve Agenda
3. Approve September 24, 2024 Meeting Minutes
4. Review MPCA Grant Proposals
5. Public Works Equipment Review
6. Dark Sky Update
7. Solar Tour Review
8. Next Meeting – Tuesday, November 26
9. Adjournment



ENERGY AND ENVIRONMENT COMMITTEE

Meeting Minutes

Tuesday, September 24, 2024 5:00 PM – 6:00 PM

1. Roll Call

Committee Attendees: Chair Lauren Lindelof, Dr. Edmund Chute, KC Chermak, and David Ferri.

Wayzata City Staff Member: Nick Kieser, Parks and Environment Planner.

2. Approve Agenda

Motion to approve agenda, first by Ferri, seconded by Chermak. Motion passed unanimously.

3. Approve August 27, 2024 Meeting Minutes

Motion to approve minutes as amended, first by Chute, seconded by Ferri. Motion passed unanimously.

4. Solar Tour Discussion

Chair Lindelof noted that Wayzata has signed up for ASES National Solar Tour as well as the MN Solar Tour. The Solar Tour is scheduled from October 4 – 6 and Wayzata will hold an event at the Wayzata Bar & Grill on Sunday, October 6 from 3:00 PM – 5:00 PM. The Muni will be inventing a cocktail, “Solar Flare”, that will be available during the event. Blue Horizon will provide additional materials that showcase the solar installations.

5. Dark Sky Discussion

Staff presented Plymouth’s Exterior Lighting Ordinance and will meet with Plymouth staff to review and discuss with an intent to copy and modify for our own use, possible with help from a consultant. Discussion centered on modifications for Dark Sky compliant lighting and lighting efficiency rather than a comprehensive code-focused set of policies. Staff will continue to review options to incorporate Dark Sky compliant regulations after the discussion with Plymouth.

6. Sustainability Champion Award Update

No applications have been received so staff is still actively encouraging organizations to apply.

7. Local Climate Action Grant Update

Staff noted that the grant agreement with the MPCA will be reviewed on the October 8 City Council meeting for approval. Once that agreement is approved, staff will solicit proposals from consultants that can perform the work noted in the grant application. The deadline for completing the grant scope is June 25, 2025.

7. Next Meeting – Tuesday, October 29

Meetings will start at 5:30 PM to determine if that time works better for the Committee Members.

8. Adjournment

Motion to adjourn the meeting, first by Chute, seconded by Chermak. Motion passed unanimously.



Agency Interest No. 89896 | SWIFT Contract No. 254965

WAYZATA CITY OPERATIONS CLIMATE ADAPTATION & RESILIENCE PLAN





October 23, 2024

Nick Kieser | Parks and Environment Planner
600 Rice Street East
Wayzata, MN 55391
nkieser@wayzata.org

Subject: SRF Proposal for Wayzata City Operations Climate Adaptation and Resilience Plan

Dear Nick Kieser and Members of the Selection Committee:

SRF Consulting Group (SRF) and Local Climate Solutions are excited to submit this proposal for developing the City's Climate and Resilience Plan. We wholeheartedly support the City's sustainability and resilience goals and are excited for the opportunity to play a role in advancing them. We have carefully selected a team with experience and expertise that meets every aspect of this project's need.

We believe the following elements set our team apart:

Expertise and experience: Our team consists of professionals who have dedicated their careers to advancing climate mitigation and resilience. Project Manager **Ash Narayanan** has 15 years of experience advancing policy, projects and initiatives that have reduced carbon emissions across the Midwest. **Abby Finis**, Principal at Local Climate Solutions has pioneered climate and resilience planning in the region and has authored several plans that have seen their recommendations become reality.

Multidisciplinary support: SRF Consulting Group's team consists of engineers, planners and data professionals who provide expertise across several infrastructure areas including energy, buildings, transportation, fleet management, and water resources. Our dedicated EcoTeam provides seamless and comprehensive support to create a holistic plan.

Wayzata relationships and experience: SRF's past experience working with the City has provided us with a deep understanding of the challenges and opportunities the development of this plan presents. Our ongoing relationships will help us engage staff, align stakeholders towards the plan's goals and support future project implementation.

We look forward to working with the City on this important plan, which we see as a first step towards a broader community-wide climate and resilience planning effort.

We are grateful for this opportunity to work with the City of Wayzata. Should you have any questions or need any clarifications, please contact Ash Narayanan at 763.452.4765 or at anarayanan@srfconsulting.com. We are excited to work on this important project.

Sincerely,

Ash Narayanan
Project Manager

Erin Hunker, PE, CFM
Project Director

FIRM OVERVIEW

SRF | SRF Consulting Group



Headquarters:
3701 Wayzata Boulevard, Suite 100
Minneapolis, MN 55416

763.452.4765

anarayanan@srfconsulting.com

srfconsulting.com

Established in 1961, SRF offers comprehensive, integrated consulting services. As a 100 percent employee-owned company, SRF's engineers, planners, and designers collaborate with our clients and their stakeholders to develop creative solutions for the most challenging projects. Together, we create vibrant communities and dynamic experiences. Our award-winning projects range from designing roadways, bikeways, parks, and bridges to planning statewide transportation systems, to revitalizing neighborhoods and urban spaces.

Delivered with integrity and passion, SRF's comprehensive range of services include:

- Design and Maintenance of Green Infrastructure
- Parks and Trails Planning
- Environmental Justice Analysis and Engagement
- Vegetation and Wildlife Surveys
- Ecosystem/Habitat Restoration
- Climate and Resiliency Planning
- Greenhouse Gas and Air Pollution Modeling
- Vehicle Miles Traveled (VMT) Reduction Plan
- Carbon Reduction Strategies
- Multimodal Design
- Electric Vehicle Planning
- Watershed and Natural Resource Plans
- Stream and Channel Assessments
- Design, Management, and Stream, Lake, and Wetland Restoration
- Lifecycle Cost-Benefit Analysis
- Permitting, Regulatory Review, and Policy Development

SRF's **Integrated Ecology Team (EcoTeam)** believes that utilizing ecological principles and processes in project planning and design will achieve healthy ecosystems and resilient communities. Whether it be incorporating green infrastructure into the public realm, enhancing ecological function through native plant restoration, or helping communities reduce green house gas emissions and vehicle miles traveled, SRF works to develop solutions that address the complex problems facing communities.

SRF's EcoTeam considers the many interests and issues related to water resource management, natural resources, parks, wetlands, urban green space, transportation, and community stakeholder engagement to provide a comprehensive approach to ecosystem restoration, protection efforts, resiliency planning, and design. **This integrated approach helps clients address challenges within resource management and incorporate resiliency into programs and projects.**



Local Climate Solutions

We offer a collaborative approach to research and analysis, planning, and program development services that center equitable outcomes. Local Climate Solutions is a climate and energy planning firm that assists public entities with implementing equitable climate action. Abby Finis with Local Climate Solutions will support the development of the City operations-focused Climate Adaptation and Resiliency Plan. She will provide additional resources to review existing conditions and plans to assess opportunities to improve the City's resiliency and reduce greenhouse gas emissions. In addition, she will work with lead consultants and staff to develop strategies across City departments, policies, and budget processes. Abby will assist with the completion of the final plan.

Integrity

Solutions

Community

PROJECT UNDERSTANDING AND APPROACH

The City of Wayzata is committed to advancing sustainability. Since the creation of the Energy and Environment Committee in 2019, the City has advanced several initiatives that seek to reduce carbon emissions and reduce energy burdens.

The City created an Energy Action Plan that details strategies to reduce carbon emissions and energy burdens citywide. The City has also completed a fleet study as a starting point to transition city-owned vehicles to those powered by electricity. Wayzata has also been raising the profile of these initiatives through community outreach to faith organizations and presenting a Sustainable Champion Award to the Wayzata Community Church.

The City is now looking to create a cohesive plan that will provide a series of strategies to advance sustainability and resilience. The first phase of this effort will focus on City operations as identified in the Energy Action Plan. SRF and Local Climate Solutions have come together to present a team who will go beyond creating a plan—and instead create a foundational framework for future sustainability efforts.

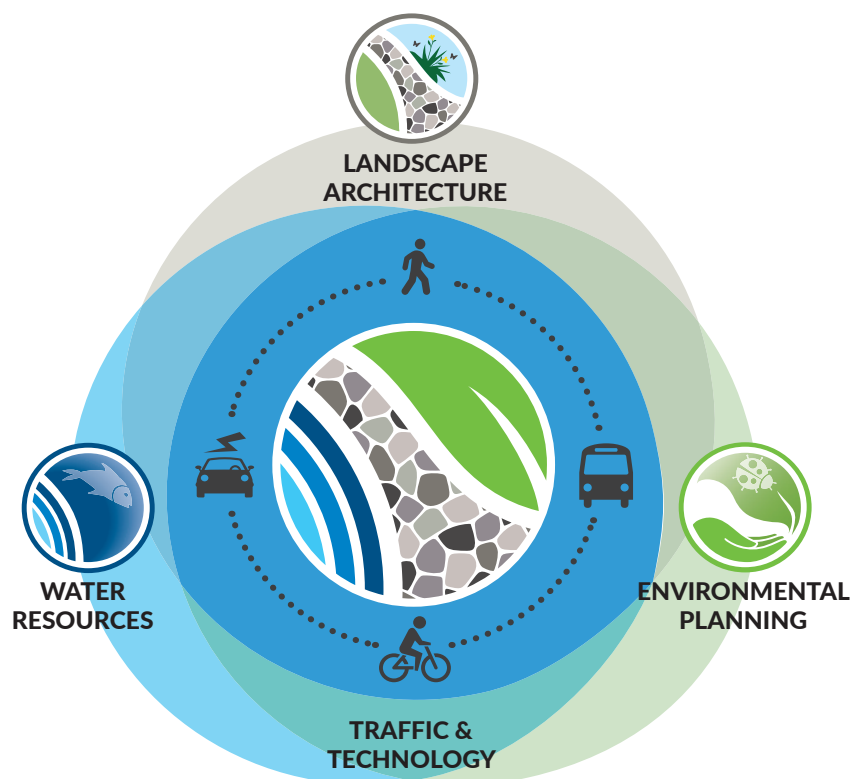
Our team consists of professionals who have dedicated their careers to creating more sustainable and resilient communities and are fully invested in the outcomes of this work. Through our years of experience helping other communities create such plans, we deeply understand the steps involved, potential challenges and opportunities this effort presents. Our team understands that key City staff, members of the Energy and Environment Committee and the City Council will be important participants in the process. We will work with the project management team to ensure that the right people are at the table and that policy makers are being brought along throughout the process.

We recognize and wholeheartedly support the City's commitment to sustainability and retaining its community character. We note a particular emphasis on protecting Lake Minnetonka and other natural resources that make it unique. We also recognize the City's interest in reducing energy use and saving costs in the process. Our approach will seek to advance the many co-benefits that are aligned with becoming more sustainable.

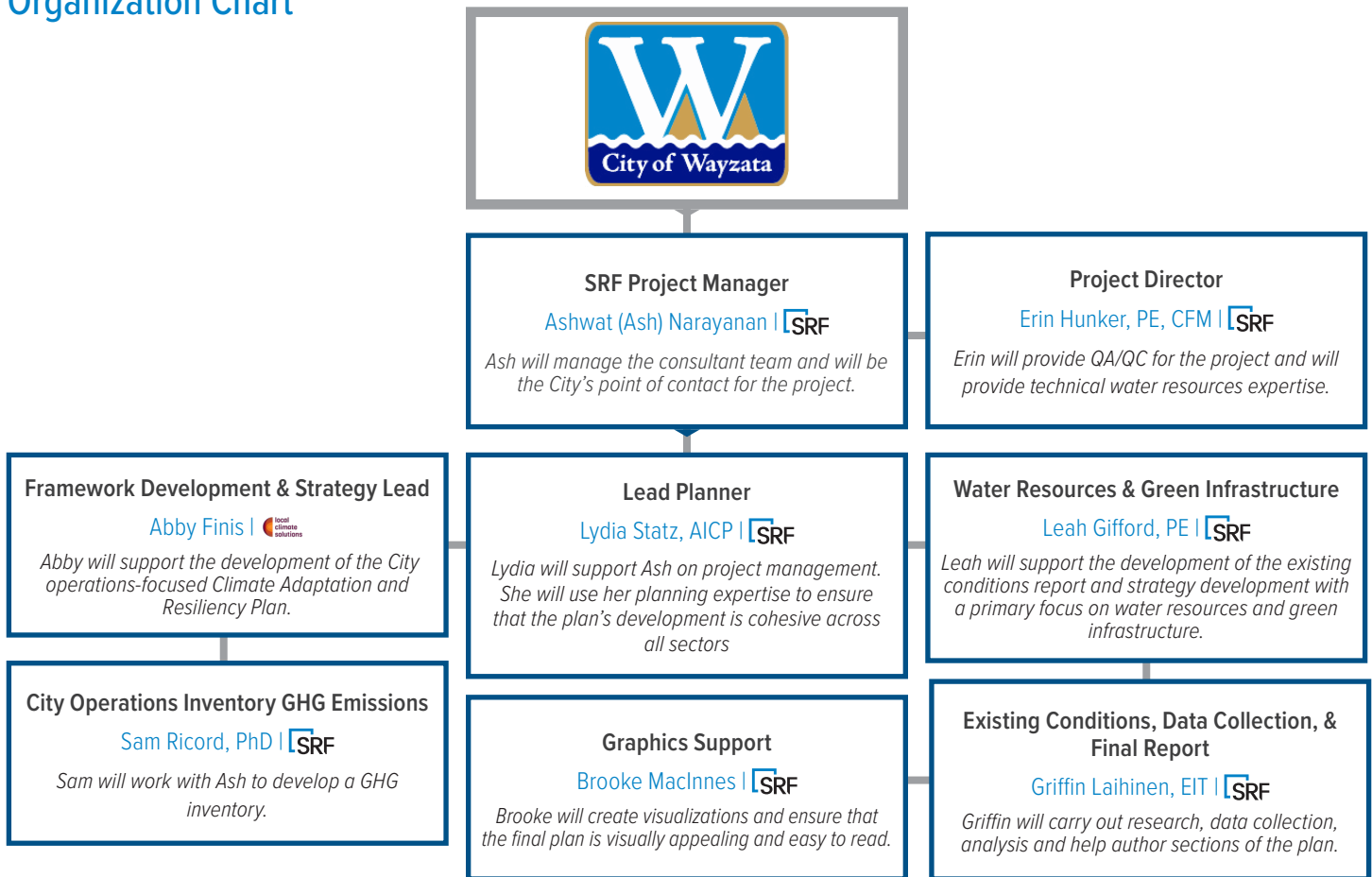
While advancing future sustainability goals will be a key element of the plan, our team also understands that City assets must be protected against current weather-related threats, including flooding, hail and extreme temperatures. **Our team of experts includes infrastructure designers who have advanced resiliency on projects across the region.** We will incorporate their knowledge of resiliency planning, design and implementation into the plan.

Our team also understands the importance of developing the plan in a way that facilitates implementation. We recognize that City staff may often be short on capacity with a focus on day-to-day City operations. Our approach will seek to make the plan easily digestible, and clearly demarcate short, medium, and long-term strategies.

We recognize that there may be diverging views on sustainability across various stakeholders. Our team is skilled in facilitation and bringing groups towards consensus. SRF has built trust through our long history of work with the City of Wayzata—and we will seek to match the right messengers from our team with project stakeholders.



Organization Chart



ASHWAT (ASH) NARAYANAN | PROJECT MANAGER



Ash has 15 years of experience in engineering and policy focused on reducing carbon emissions. He has authored or played leading roles in developing climate and resilience plans for communities across the Midwest including the City of Saint Paul, Dane County and the Shakopee Mdewakanton Sioux Community. He was appointed to the state's Sustainable Transportation Advisory Committee (STAC) and co-chaired its Transportation Options Committee where he led the effort to develop goals to reduce carbon emissions from transportation. Ash has led several large carbon reduction efforts for agencies like MnDOT and the City of Bloomington. He brings a proactive project management style with expertise in building relationships and consensus among stakeholders with diverse viewpoints.

Areas of Specialty

- Climate and resilience planning
- Traffic engineering
- Transportation Policy
- Stakeholder facilitation and training

Education

MS -Transportation Engineering, University of Wisconsin-Madison,
BT – Civil Engineering, Anna University

City of Saint Paul Climate and Resilience Plan, Minnesota.* Authored the transportation section of the City's plan that outlines infrastructure and investment required to achieve climate, resilience and equity goals.

Shakopee Mdewakanton Sioux Community Climate Action Plan, Minnesota.* Contributed to the transportation section of the plan that modeled carbon emissions, and provided implementation pathways to achieve a sustainable community.

MnDOT Carbon Reduction Plan, Minnesota. Leading work with the Minnesota Department of Transportation (MnDOT) to identify strategies to fund projects that reduce carbon emissions and provide co-benefits to state residents.

MnDOT VMT Reduction Target Analysis and Implementation, Minnesota. MnDOT has established a target to reduce vehicle miles traveled (VMT) across its system by 20 percent per capita by 2050. Leading the effort to identify strategies to achieve this target. Working with MnDOT leadership to carry out analyses of selected strategy packages that will not only advance this goal, but also help the agency communicate it to internal and external partners.

MnDOT Resilience Improvement Plan, Minnesota. Assisting MnDOT with creating a scoring and prioritizing methodology to fund projects that will enhance the resilience of the state's transportation network against natural disasters and other threats.

*Completed with previous employer



ERIN HUNKER, PE, CFM | PROJECT DIRECTOR



Erin has 22 years of experience in drainage and water resources planning, engineering and design. She has served as project manager on stormwater management systems at the planning level, preliminary, and final design stages, and has obtained permits for stormwater management systems for various types of projects. Her projects have included extensive use of XP-SWMM, HydroCAD, P8, HEC-RAS, MIDS Calculator, and other modeling software. In addition to more traditional storm sewer and stormwater pond designs, Erin has designed innovative stormwater green infrastructure Best Management Practices (BMPs) that enhance the project environment while meeting regulatory requirements. Erin is also a Manager of the Nine Mile Creek Watershed District.

Areas of Specialty

- Stormwater Management Planning
- Preliminary Design
- Final Design
- Hydrologic and Hydraulic Analysis

Education

MS in Engineering Professional Practice, University of Wisconsin-Madison

BS in Biosystems/Agricultural Engineering, University of Minnesota

Registration

Professional Engineer: MN#45040 and ND #PE-6657

Certification

Floodplain Manager #32280

1NE Watershed Planning and Preliminary Design, Minneapolis, Minnesota. Project manager for the planning and preliminary design of multiple Best Management Practices within the 1NE Watershed in northeast Minneapolis. The project includes development and detailed analysis of multiple stormwater management scenarios that address flooding and improve water quality and ecological function within the 1NE Watershed. Led the PMT meetings with key stakeholders from the Mississippi Watershed Management Organization, City of Minneapolis, and Minneapolis Park and Recreation Board. Developed detailed XP-SWMM and P8 modeling, GIS analysis, and concept and preliminary design of several types of BMPs, including surface detention basins, underground detention/retention systems, raingardens, and tree trenches.

Northern Columbia Golf Course BMPs Project, Minneapolis, Minnesota. Project manager for the final design of multiple BMPs, new storm sewer infrastructure, and recreation of native vegetation and habitat within Columbia Golf Course. Led the PMT meetings with key stakeholders from the Mississippi Watershed Management Organization, City of Minneapolis, Minneapolis Park and Recreation Board and golf course architect.

Markgrafs Lake Phosphorus Load Reduction Study, South Washington Watershed District. Project director and quality reviewer for completion of a feasibility study to identify opportunities to reduce Total Phosphorus loading into Markgrafs Lake.



LYDIA STATZ, AICP | LEAD PLANNER



Lydia has eight years of community planning experience leading projects ranging from corridor studies to regional mobility and policy plans. She specializes in managing projects that advance sustainable transportation systems, including public transit, bicycle and pedestrian mobility, greenhouse gas reduction, and long-range planning to assist agencies in achieving their sustainability and community goals. Lydia has worked in over 18 states around the country, giving her a strong basis in innovative best practices that she brings to local clients. She is motivated by helping communities navigate the tradeoffs of high-impact planning decisions and has extensive experience leading and facilitating conversations surrounding policy and funding with a variety of stakeholders. Lydia also specializes in funding and grants, and assists clients with financial planning, identifying funding opportunities, and developing successful grant applications to implement major projects.

Areas of Specialty

- Community Engagement
- Meeting Facilitation and Stakeholder Engagement
- Alternatives Analysis
- Scenario Planning and Modeling
- Policy Analysis and Strategic Planning
- VMT Reduction and Induced Demand

Education

University of Wisconsin-Milwaukee, WI - Master of Urban and Regional Planning

University of Wisconsin-Madison, WI - Bachelor of Arts

Certification

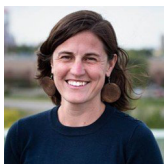
American Institute of Certified Planners

Hennepin County VMT Reduction Strategy, Hennepin County, Minnesota.* Lydia was the project manager for the innovative vehicle miles traveled reduction strategy, which aimed to reduce VMT by 20 percent per capita by 2040. The plan builds on the County's climate action plan goals and was one of the first focused VMT reduction studies completed in the Midwest. The plan resulted in a suite of recommendations, including over 40 proposed actions the County may implement to reduce trips or induce mode shift for daily travel.

Go West Saint Paul Master Pedestrian and Bicycle Plan, West Saint Paul, Minnesota*. Lydia was the project manager for the City's master pedestrian and bicycle plan, which identified future projects to develop a comprehensive active transportation network throughout the City. The plan included extensive community engagement, existing conditions research, and the identification of short-and long-term policies and projects to connect community residents to the larger regional network.

Hoboken Complete Streets Design and Implementation Plan, Hoboken, New Jersey.* Lydia was the lead planner for the Hoboken Street Design Guide, which developed street typologies and design principles for all streets within the City of Hoboken. The design guide developed detailed guidance to implement the City's complete streets policy, including direction on green infrastructure, safety treatments, traffic calming and curbside management. The process was built around public and stakeholder engagement, including separate communications campaigns for business owners, schools and families, and stakeholders such as first responders and street maintenance staff. Many projects from the plan have since been implemented, contributing to the City's record of zero traffic fatalities since 2017.

**Completed with previous employer*



ABBY FINIS | FRAMEWORK DEVELOPMENT & STRATEGY LEAD



Abby has worked on climate solutions with state, county, and local governments for more than a dozen years. She has deep experience in energy and climate research and analysis, stakeholder facilitation, state and local regulatory authorities, and program implementation. Abby works on state, regional, and local planning initiatives to drive greenhouse gas emissions reductions, while improving local economic conditions, and achieving a quality of life for all, particularly for the most under-resourced communities. Prior to starting Local Climate Solutions, Abby worked at the Great Plains Institute where she became the go-to technical assistance provider for governmental entities seeking to advance climate mitigation and adaptation efforts.

Areas of Specialty

- Research and analysis
- Climate planning
- Stakeholder engagement
- Program implementation

Education

MS, Urban/Regional Planning,
Environmental/Energy Planning,
University of Minnesota

BS, Political Science, University of
Oregon

Hopkins Sustainability Work Plan, Minnesota. The Hopkins Sustainability Work Plan provides a structured, strategic approach to implementing and managing the City's sustainability initiatives. This document assists the Sustainability Specialist in prioritizing the workload in consideration of deadlines, impact, and available resources. The City is utilizing the Work Plan as a cohesive framework that aligns ongoing and future projects with the City's sustainability objectives. This Work Plan will support ongoing climate action planning efforts.

Minnetonka Climate Action and Adaptation Plan, Minnesota. The Minnetonka Climate Action and Adaptation was adopted in spring of 2024. The plan includes strategies and actions aimed at reducing emissions and enhancing resilience of residents and businesses. The plan also includes details on what the City can do to address its emissions as well as support the broader community in reducing overall greenhouse gas emissions.

Duluth Climate Action Workplan, Minnesota. The Duluth Climate Action Work Plan focuses on what the City can do internally over a five-year time period.



LEAH GIFFORD, PE | WATER RESOURCES & GREEN INFRASTRUCTURE



Leah has 17 years of experience in water resources engineering. She leads projects ranging from planning and feasibility studies, preliminary and final design projects, hydrologic and hydraulic modeling, to MS4 support and GIS mapping. She has a well-rounded understanding of regulatory environments, engineering design procedures, sustainability considerations, and has a passion for working on community-oriented and education-focused projects. As Plymouth's Alternate Commissioner for the Shingle Creek Watershed Management Organization, Leah understands the perspective and goals of WMOs.

Areas of Specialty

- Drainage Design
- Stormwater Management Planning
- Hydrologic/Hydraulic Modeling
- BMP Design
- Water Quality Modeling
- GIS Mapping

Education

MS, Water Resources Science,
University of Minnesota

BCE, Southern Illinois University
Edwardsville

Registration

Professional Engineer: MN #52263
and IL #062.072835

Certification

Design of Stormwater Pollution
Prevention Plans

Markgrafs Lake Phosphorus Load Reduction Study, South Washington Watershed District.

Leah was the project manager for the watershed study to reduce P loading to Markgrafs Lake in Woodbury, Minnesota. The team developed 34 projects and maintenance activities and then ranked and screened in a scoring matrix based on 14 considerations. Seven projects chosen were advanced to a concept level design where cost effectiveness and pollutant removal were prioritized for potential final design projects.

CRWD Stormwater Facility Management Program Development, Capitol Region Watershed District.

Leah was the project manager for the development of a cooperative operation and maintenance program for CRWD. The goal was for public agencies to optimize their maintenance efforts and to help the function and lifespan of the stormwater BMPs in the watershed. Within this work, SRF assessed the long term maintenance consideration to two large regional BMPS – Gottfried's Pit and Como Lake Ponds. She quantitatively estimated the long term costs and benefits of ownership of these BMPs as well as the risks of ownership.

WisDOT Statewide Resiliency Data Management. Leah served as the water resources task lead for this Geographic Information System (GIS) led project. This entailed developing a literature review on practices and work done by other agencies and providing guidance on data usage and best practices from a water resources view. She reviewed the processes and results to ensure quality and realistic outputs.



SAMUEL RICORD, PhD | CITY OPERATIONS INVENTORY GHG EMISSIONS



Samuel Ricord has five years of experience in building sustainable and equitable transportation systems in the United States. With an education in civil and traffic engineering, his work has focused on the confluence of transportation equity, technology, sustainability, and safety. Prior to his current role, Sam completed his doctoral degree from the University of Washington. During his studies he covered a wide variety of transportation related topics, including investigating the intersection of transportation equity and technology, creating quantifiable methods for assessing equity, and addressing critical equity and safety topics in tribal communities. Sam currently supports efforts at SRF to help our client agencies advance their sustainability and resilience goals, including the Minnesota Carbon Reduction Plan, Resilience Improvement Plan and implementing the vehicle miles traveled (VMT) reduction target.

Areas of Specialty

- Transportation Equity Analysis
- Safety Analysis
- Transportation Technology Implementation
- Transportation Research

Education

PhD, Civil and Environmental Engineering, University of Washington

MS, Civil and Environmental Engineering, University of Washington

BS, Civil and Environmental Engineering, University of Washington

Greenhouse Gas Reduction Plan, Bloomington, Minnesota. Developed an inventory of transportation GHG emissions for the city of Bloomington, MN. This includes analysis of current travel patterns and calculation of corresponding GHG emissions as well as forecasting travel behavior to understand emissions into the future.

***Equity Analysis for Washington State DOT (WSDOT) Toll Facilities.** Conducted an equity analysis for five WSDOT toll facilities to understand the demographics of users of the toll facilities and demographics of non-users of the toll facility. This included using ecological regression to estimate true user demographics from disaggregated census and travel data.

***Quantification of Equity and Equity Biases in Transportation Data.** Created a methodological framework to quantify the equity concerns that exist in transportation big data and assess how these concerns are prevalent in the realms of transportation technology and the data-driven decision-making process.

MnDOT Local Roadway Research Board (LRRB). Conducted several research projects for the LRRB Research implementation Committee, which involved the synthesis of existing research and development of practical research implementation and tech transfer. Project topics include safety behavior, public works engineering career promotion, safety benefits of bike/ped interventions, electronic weight tickets, comparing precast/cast-in-place culverts, regulations of street art, and local agency EV infrastructure needs.

**Completed with previous employer*



GRIFFIN LAIHINEN, EIT | EXISTING CONDITIONS, DATA COLLECTION, & FINAL REPORT



Griffin Laihin brings expertise in developing sustainable operations strategies for cities, industrial manufacturers, and nonprofits across the United States. His background in environmental and ecological engineering underpins his focus on the interconnectedness of water, energy, land footprint, and raw material flows throughout the manufacturing, use, and disposal lifecycle. His experience ranges from triple-bottom line operations forecasting to creating quantitative

decision-making methods using geospatial data. His work often involves comprehensive stakeholder engagement, including facilitating community-level discussions on relationships with food, waste, energy, and water. Griffin's skillset also includes conducting gap analyses, allowing him to identify critical areas for improvement in sustainability initiatives and operational processes. Griffin currently supports efforts at SRF to design and implement water resources solutions in the Twin Cities Metro Area.

Areas of Specialty

- Process Engineering
- Life Cycle Analysis
- GIS Mapping
- Data Analysis
- Community-Engaged Design

Education

BS, Environmental and Ecological Engineering, Purdue University – West Lafayette

Registration

Engineer in Training, NCEES ID: 24-079-28

METRO Blue Line Extension, Twin Cities, Minnesota. Design engineer for the redesign of storm sewer and green infrastructure within project right of way supporting water quality improvements in Minneapolis.

***Synthesized Food, Water, and Energy Plans: San Diego, California and Rome, Italy.** Authored a report with cross-discipline engineering team to produce existing conditions reports and future planning of water, food, energy resources for climate-change affected cities in 2050.

***Tippecanoe County, IN Transfer Station Relocation Study, Indiana.** Completed a feasibility and impact LCA study for a potential change in the location of the primary transfer station for Tippecanoe County. Griffin developed a Matlab tool for the county using environmental, social, and economic parameters allowing large data forecasting with user-inputted, Excel, and API data.

***Process Engineering and Regulation Gap Analyses in Petrochemical Units, Indiana.** Revised quality assurance, monitoring, safety review, and spectrometer infrastructure engineering plans for six large petrochemical units bringing them in line with state and federal regulatory requirements.

**Completed with previous employer*



BROOKE MACINNES | GRAPHICS SUPPORT



Brooke is a Senior Graphic Designer at SRF with a proven track record in designing and delivering impactful print materials, interactive tools, and web-based solutions. She skillfully merges her passion for marketing and communications with a collaborative and comprehensive graphic design approach, consistently achieving project objectives and visions. Brooke has extensive knowledge of the Adobe Creative Suite, which she complements with skills in Wordpress, Wikimapping, and ArcGIS online, resulting in the creation of captivating designs and effective user experiences.

Areas of Specialty

- Graphic Design
- Websites and Interactive Media
- Brochures, Newsletters and Collateral Materials
- Social Media
- Mapping

Education

BA in Business, Bethel University;
Minors in Graphic Design and Studio Art

Olmstead County TH 14 Corridor Analysis, Minnesota. www.us14corridoranalysis.com. Development of project logo and brand identity, Wordpress website, mailers, email blasts, open house boards, and several project alternatives maps.

Chisago County TH 8 Preliminary design, Chisago County, Minnesota. Developed project logo and brand, as well as communication materials, including mapping, newsletters, online Wikimap, open house materials, and virtual open house video and ArcGIS Hubsite. th-8-online-open-house-srfconsulting.hub.arcgis.com.

MnDOT TH 23/TH 9 Reduced Conflict Intersection in New London, Minnesota. Developed project logo and followed MnDOT brand guidelines for public engagement materials and ADA compliance standards. Developed illustrations, public meeting boards, mailers, handouts, and graphical maps to assist in public understanding of J-turn intersection.

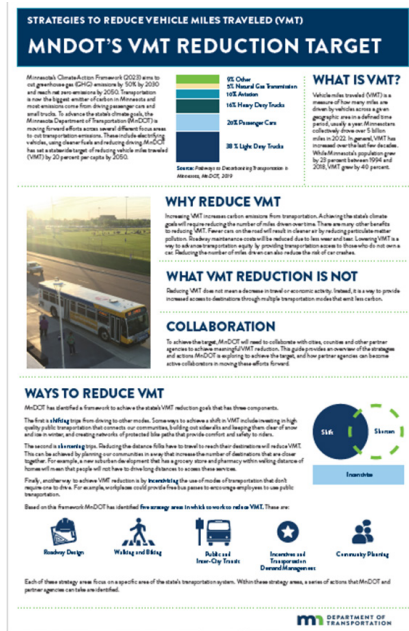
MnDOT Glencoe Comprehensive Transportation Study, Minnesota. Development of public engagement materials for the Glencoe Comprehensive Transportation Study process. Engagement methods included developing online engagement tools, in-person open house materials, and formatting processed engagement data into Study report



RELEVANT EXPERIENCE

MnDOT VMT Reduction Target Analysis and Education

Minnesota



SRF Consulting Group (SRF) led the effort to define and implement MnDOT's Vehicle Miles Traveled (VMT) reduction target. SRF coordinated an internal MnDOT workgroup consisting of leadership from across the organization and facilitated several conversations over a year on challenges and opportunities to implementing the target.

We also developed a framework and methodology to understand the levers that MnDOT could use and how the agency could implement the goal in partnership with Met Council, cities, counties and local governments.

Through data analysis completed using Replica software, an analysis was conducted of how and where people make trips in single occupancy vehicles throughout the state. Based on this, we determined that different types of mode-shifts require different strategies that must be implemented in accordance with local context. Our team developed a list of strategies and actions that are stratified by mode, community context and party responsible for implementation.

SRF also developed a communications toolkit that includes ways that leadership and MnDOT project managers can communicate about the target internally and to partners. Several two-page documents to communicate the strategies easily and in an accessible manner were developed, in addition to a video. SRF's team built widespread support for the adoption of the target through our data-driven, yet people-first approach.

MnDOT GHG and VMT Capacity Assessment and Mitigation

Minnesota



Assessment Maturity	Level 1: Project	Level 2: MPO Plan (Metro & greater MN MPOs)	Level 3: Regional and Statewide Plan (Not currently available)
Summary	A trunk highway capacity expansion project is analyzed. The network directly within the project is analyzed for emissions and VMT impacts. If interlinking/mitigation is needed, the project proposers develop a mitigation plan.	A trunk highway capacity expansion project is analyzed in the context of an MPO plan of projects. All projects are evaluated for their emissions and VMT reduction benefits and impacts. If interlinking/mitigation is needed, the MPO develops a mitigation plan.	A trunk highway capacity expansion project is analyzed in the context of a region and state. All multimodal investments are evaluated for their emissions and VMT reduction benefits and impacts. If interlinking/mitigation is needed, the region develops a mitigation plan.
Assessment Area + Method(s) (Area of analysis and determination of current and future speeds, traffic volume, etc.)	Affected network of project is analyzed using currently available travel demand forecasts for a project area to determine build/no build operational impacts	MPO region and plan of projects evaluated with the Regional Model in the metro area and using greater Minnesota MPO transportation demand models in MPO's outside the metro	Regional plan of multimodal investments evaluated regionally such as an ATP or Statewide (not available)
Analysis Validation (Determining net change in VMT and carbon emissions)	- Minnesota Infrastructure Carbon Estimator (MICE) - Motor Vehicle Emission Simulator (MOVES) project level tool	- Minnesota Infrastructure Carbon Estimator (MICE) - Motor Vehicle Emission Simulator (MOVES) program level tool - Off-the-shelf program of projects evaluation tool (e.g. Georgetown Climate Center TEA-CART)	- Motor Vehicle Emission Simulator (MOVES) program level tool - Emissions evaluation integrated into TDM analysis - Off-the-shelf program of projects evaluation tool (e.g. Georgetown Climate Center TEA-CART)
Conformance	Project build results in a reduction of emissions and VMT per capita over the 20 years of the project	Multimodal MPO program of projects conforms with net emissions and VMT per capita reduction targets for 2025, 2030, 2040, and 2050	Multimodal regional program of projects conforms with net emissions and VMT per capita reduction targets for 2025, 2030, 2040, and 2050
Mitigation/Interlinking Management Plan	Project proposer develops offsetting mitigation management plan	MPO develops offsetting mitigation management plan	Region develops offsetting mitigation management plan

SRF Consulting Group (SRF) supported the development of findings and recommendations of the Greenhouse Gas Mitigation Working Group, which was established by the 2023 Minnesota Legislature. Our team developed findings and a framework for assessing and mitigating the greenhouse gas (GHG) emissions and vehicle miles traveled (VMT) impacts of increasing capacity on the state's trunk highway system.

Our team helped the working group develop recommendations that included a model to assess implementation maturity for the legislation. We analyzed various tools and approaches that could be used including travel demand models, VMT analysis, EPA's MOVES tool, Minnesota Infrastructure Carbon Estimation Tool (MICE), multimodal accessibility tools and induced demand calculators.

We developed an expanded list of mitigation actions that local agencies can take including land use actions, specific active transportation and transit projects, travel demand management options and safety improvements.

SRF authored and submitted a final report that was presented to the Legislature in February 2024 and will continue to support the development of assessment tools this year.



CARBON REDUCTION STRATEGY 2023



SRF (as a sub to ICF) led the creation of the Minnesota Department of Transportation's Carbon Reduction Strategy's application process and scoring details. Our team developed methods through which transit, walking, biking, EV and other projects could be awarded funding through a competitive application process to receive federal Carbon Reduction Program funds. We led a facilitation process that brought various stakeholders together to identify common goals and develop weights for other project co-benefits. Our team developed complete application materials and a tool that would help applicants understand how their project would score on a competitive basis.

EXAMPLE PROJECTS

STREETLIGHT LED REPLACEMENTS— MOORHEAD, MN

The City of Moorhead identified CRP funds as an opportunity to accelerate the conversion of traditional High Pressure Sodium (HPS) streetlights to Light Emitting Diode (LED) bulbs throughout the city. LED bulbs use less energy and have a longer lifespan than HPS bulbs. The City installed 93 LED bulbs saving between 75 and 225 watts of power per light fixture.

The new bulbs also reduce operational costs as they will need to be replaced less frequently. HPS bulbs have to be replaced every 3-5 years while LED bulbs can last up to 15 years.

Contact
Jonathan Atkins | jonathan.atkins@moorheadmn.gov
City of Moorhead



Greenhouse Gas Reduction Plan

Bloomington, Minnesota

The City of Bloomington is working to reduce carbon emissions sector-wide to advance its target of achieving carbon neutrality by 2050. As part of this effort, the City is working to better understand carbon emissions from its surface transportation system and use this knowledge as a base for future policy and infrastructure development.

The study developed methods to estimate and calculate vehicle miles traveled (VMT) and associated carbon emissions. Using these estimates, scenarios to achieve the City's goal of carbon neutrality by reducing VMT and electrifying transportation were developed. An analysis was conducted of travel behavior in the city to better understand trip purpose and lengths. The remainder of the study focused on identifying ways to reduce driving—a key component of transportation emissions reduction. As other City plans have focused on vehicle electrification, it was not a focus of this study. Following these analyses, a set of strategies and associated action items to move the City towards a carbon neutral transportation system were developed. The study was carried out between September 2023 and May 2024.

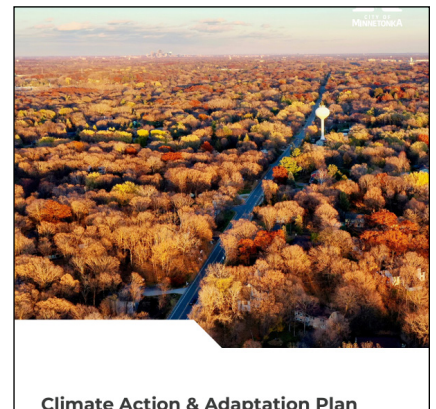


LOCAL CLIMATE SOLUTIONS PROJECT EXPERIENCE

City of Minnetonka Climate Action & Adaptation Plan

Minnetonka, Minnesota

The Minnetonka Climate Action and Adaptation was adopted in spring of 2024. The plan includes strategies and actions aimed at reducing emissions and enhancing resilience of residents and businesses. The plan also includes details on what the City can do to address its emissions as well as support the broader community in reducing overall greenhouse gas emissions.

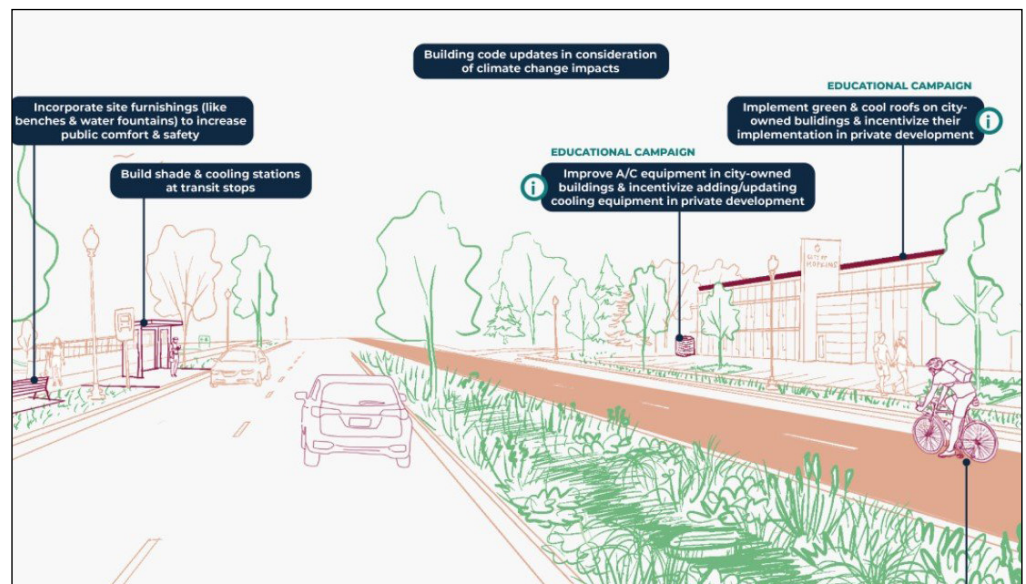


Climate Action & Adaptation Plan

Hopkins Sustainability Work Plan

Hopkins, Minnesota

The Hopkins Sustainability Work Plan provides a structured, strategic approach to implementing and managing the City's sustainability initiatives. This document assists the Sustainability Specialist in prioritizing the workload in consideration of deadlines, impact, and available resources. The City is utilizing the Work Plan as a cohesive framework that aligns ongoing and future projects with the City's sustainability objectives. This Work Plan will support ongoing climate action planning efforts.



DETAILED WORK PLAN

TASK 1



PROJECT LAUNCH AND MANAGEMENT

Understanding the grant's deadline of June 30, 2025 to finalize the project, our team is committed to commencing work as soon as possible, and to collaborating with the City to advance the project efficiently. Immediately upon notice to proceed, project manager Ash Narayanan will schedule a kick-off meeting with the SRF project team and City staff to finalize the project's work plan, discuss schedule, and set expectations for project communications. Ash will also schedule bi-weekly coordination calls for City staff and key consultant team members and provide monthly project invoices and written progress reports.

STAKEHOLDER COLLABORATION

We will also work with City staff to develop a schedule and strategy for collaboration with the Energy and Environment Committee. Given the project timing, we would recommend up to three meetings with this group, focused on the topics below:

- **Meeting 1:** Project introduction and Existing Conditions
- **Meeting 2:** Collaborate on Strategy Development
- **Meeting 3:** Review strategies and collaborate on implementation plans

The Energy and Environment Committee would also have an opportunity to review the plan's final documents prior to submittal to MPCA at the end of the grant agreement.

STAFF ENGAGEMENT

We will also work with the project management team to identify key staff whose input will be critical to the development and implementation of the plan. SRF will host a facilitated session with staff to provide an overview of the process, gather input into the plan and understand key challenges and opportunities.

TASK 1 DELIVERABLES

- ☒ All meeting notes

TASK 2



EXISTING CONDITIONS REPORT

The Existing Conditions report is critical to developing our team's understanding of the City's baseline operations and identifying major challenges and opportunities to be addressed through the planning process.

REVIEW EXISTING DATA AND REPORTS

As a first step, our team will review a compilation of existing reports and data, including, but not limited to:

- | | |
|---|--|
| ☒ EV fleet study | ☒ City's Parks and Trails Master Plan |
| ☒ Energy Action Plan | ☒ Energy, water, and waste data for city-owned buildings and facilities |
| ☒ Utility infrastructure GIS data | ☒ Information on recent City initiatives (such as municipal solar, LED lighting installations, and electrification upgrades) |
| ☒ Emergency preparedness plans and information | ☒ Other City planning efforts, such as the City Strategic Plan, Comprehensive Plan, and Wayzata Boulevard Corridor Study |
| ☒ City forestry plans, tree inventory, and emerald ash borer management plans | |

Our team will develop a limited summary of these documents and data, focused on key takeaways that may influence recommendations and strategies. We will use these documents to begin developing an inventory of strategies and recommendations as included in previous planning work, to ensure the plan builds on previous studies. We will work with key staff to identify background and data on current and past conditions, upcoming projects and other planning efforts. Other data sources that will be used include available city operations inventory data, energy data for city buildings to be used in B3 benchmarking, parking and vehicle telematics data and water and wastewater usage.

CONDUCT VULNERABILITY ASSESSMENT

A climate vulnerability assessment identifies likely hazards due to changing weather patterns and their likely impacts on City facilities and operations. Our team will build on the framework developed in the Metropolitan Council's Regional Climate Vulnerability Assessment to assess hazards at a more granular level. The assessment will include a summary of the likely impact of potential hazards faced by each city facility or other City asset, ranked from low to high likelihood. Possible hazards may include extreme heat, extreme rainfall, and severe weather, to name a few.

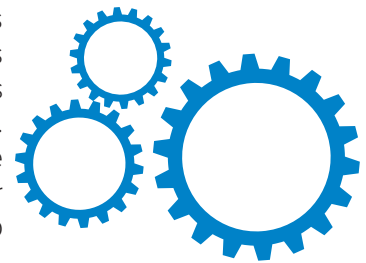
Climate Change Trends in Minnesota through 2099

Source: Common hazards framework for Vulnerability Assessment, as developed by Met Council.

HAZARD		PROJECTIONS THROUGH 2099	CONFIDENCE IN PROJECTED CHANGES
Warming Winters	Continued loss of cold extremes and dramatic warming of coldest conditions		Highest
Extreme Rainfall	Continued increase in frequency and magnitude; unprecedented flash-floods		Highest
Heat Waves	More hot days with increases in severity, coverage, and duration of heat waves		High
Drought	More days between precipitation events, leading to increased drought severity, coverage, and duration		Moderately High
Heavy Snowfall	Large events less frequent as winter warms, but occasional very large snowfalls		Moderately Low
Severe Thunderstorms & Tornadoes	More "super events" possible, even if frequency decreases		Moderately Low

ANALYZE GREENHOUSE GAS DATA AND FORECAST CITY OPERATIONS EMISSIONS

Finally, our team will use the energy, water, and wastewater data provided to develop a greenhouse gas analysis for City operations using ICLEI's Local Government Protocol. The analysis will break City emissions into categories based on major activity (such as transportation, heating/cooling, electricity) and by facility, as available. This analysis will allow us to identify and prioritize opportunities for efficiency and decarbonization. We will create an inventory of GHGs from City operations for the selected baseline year. We will then create greenhouse gas emissions reduction targets for future years in partnership with the project team and other key stakeholders. These reduction targets will be used to guide the development of strategies and actions to reduce emissions from City operations.



SUMMARY REPORT

The existing conditions analysis will be documented in a report that briefly summarizes the trends, baseline data, and key opportunities. The document will be written for consumption by a broad audience, including local residents, elected officials, City staff, and other local stakeholders, with additional technical data available in appendices. The report will be graphical and concise, and will not only communicate the baseline data, but also educate readers on the co-benefits of improved sustainability, such as cost savings, lower operations and maintenance requirements and improved air quality.

TASK 2 DELIVERABLES

- ☒ Graphical summary report
- ☒ Powerpoint slides outlining the key takeaways from the analysis
- ☒ Technical data will be provided to City staff as a spreadsheet
- ☒ Presentation to City staff on the findings of the existing conditions report

TASK 3

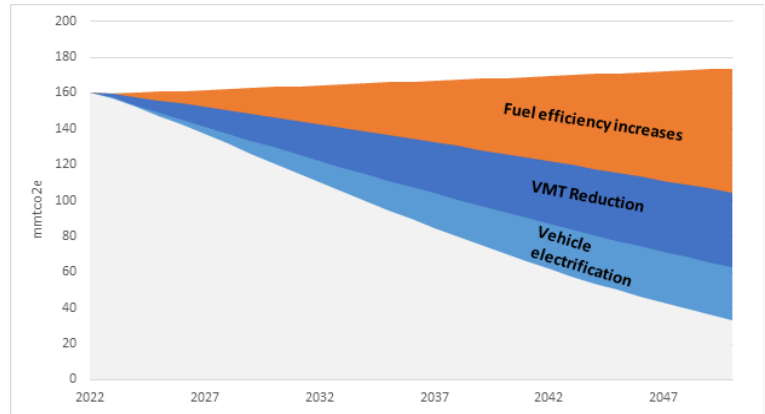


CITY OPERATIONS STRATEGY DEVELOPMENT

IDENTIFY STRATEGIES

In partnership with the project management team, key City staff and feedback from the Energy and Environment Committee and City Council, our team will create a framework that will serve as the basis for reducing carbon emissions from City operations, adapting City assets to be more resilient and increase the resilience of City infrastructure in the future. The framework will include input from the City on priorities, challenges and opportunities to advance decarbonization and increase resilience.

Based on this framework, we will create strategies under each focus area. **We will then create action steps under each strategy area that provide detailed, step-by-step guidance on reducing carbon emissions and increasing resilience from City operations.** Strategies will be rooted in our understanding of the community, based on our collaboration with City staff and the Energy and Environment Committee, and will incorporate best practices from other similar cities in the US and elsewhere.



Example wedge diagram: reducing transportation emissions

TASK 3 DELIVERABLES

- ☒ Matrix of strategies for resilience, adaptation and GHG emissions reduction
- ☒ Slides for presenting results to stakeholders

TASK 4



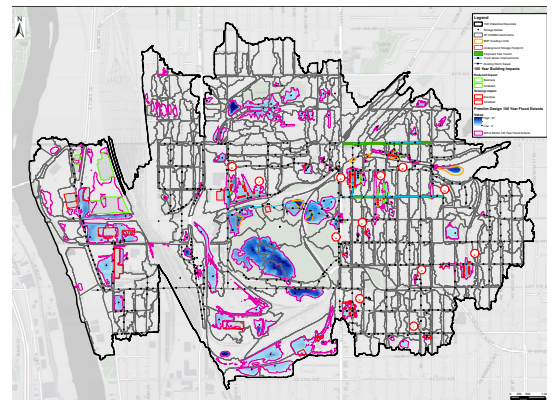
RESILIENCE AND IMPLEMENTATION PLANS

DEVELOP CITY OPERATIONS IMPLEMENTATION PLAN

Our team will then work to combine the identified strategies with input from staff on how they can be implemented. Through our planned stakeholder meetings, we will develop a detailed understanding of existing challenges and opportunities—that we will use as a lens to create an implementation plan. Our team will create a detailed plan that is rooted in reality—while also reflective of the urgency needed to reduce carbon emissions and increase resilience. Our team will stratify the identified strategies and actions by how easy or difficult they will be to implement. We will also identify the key City departments and staff who will have primary responsibility for their implementation.

DEVELOP CITY OPERATIONS RESILIENCY PLAN

Based on the climate vulnerability assessment and the identified strategies for increasing resilience, we will create an implementation plan for any adaptations needed for existing infrastructure and future resilience activities to further reduce the vulnerability of city-owned assets. We will create a spreadsheet-based tool for determining target metrics to track future implementation.



TASK 4 DELIVERABLES

- ☒ Technical memo outlining strategy implementation time frames, priority short-term actions, guidance on staff roles, and funding opportunities
- ☒ Spreadsheet tracking tool to monitor actions and implementation of key strategies

TASK 5



FINAL REPORT AND PROJECT DELIVERABLES



FINAL REPORT DEVELOPMENT

After receiving feedback and input on our deliverables from previous tasks, our team will create a final Climate Action and Resilience Plan for City operations. The plan will include background, findings from the existing conditions review, strategies and actions identified, implementation pathways and tools to track progress towards implementation. We will provide a draft package of deliverables in early May 2025 for review by city staff and the Energy and Environment Committee. We will gather feedback on this draft package, and finalize the deliverables in June 2025 in advance of the City's June 30 deadline.

TASK 5 DELIVERABLES

- ☒ Final report and submit to MPCA
- ☒ Existing Conditions assessment
- ☒ Climate vulnerability assessment
- ☒ Greenhouse gas inventory/analysis
- ☒ City operations implementation plan

SRF staff have extensive experience building consensus between City staff, public stakeholders, and agencies to develop and implement a cohesive plan.

TIMELINE FOR COMPLETION

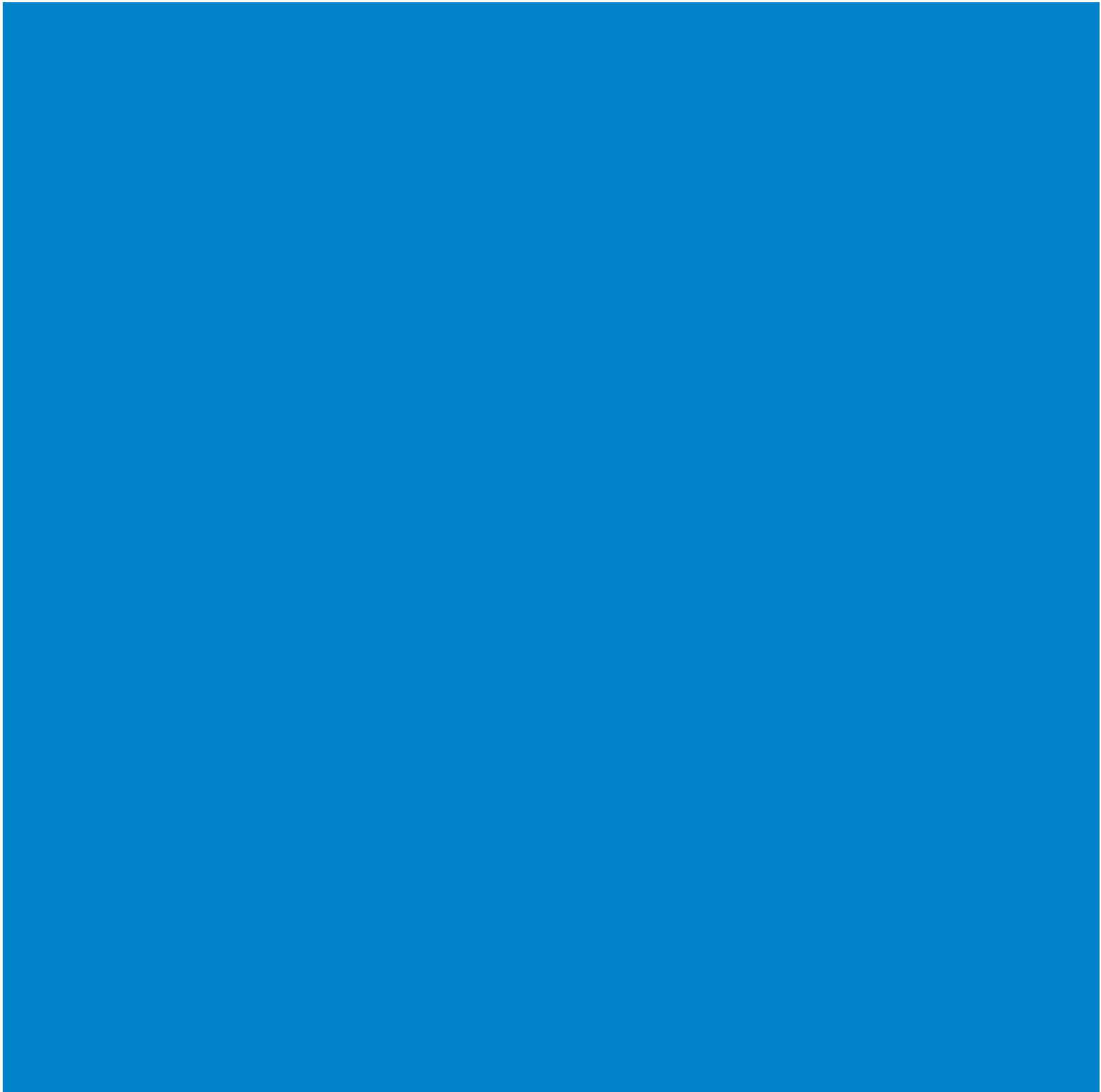
Our experience, commitment to project success, and strong relationships with the agencies give us the ability to manage this project and to complete it on schedule and within budget. Our anticipated project schedule follows.



COST

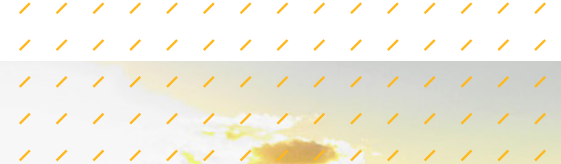
Below is SRF's cost proposal which includes the breakdown of staff hours by task.

Role	Staff and Hourly Rates								Total Hours	Total Fee
	Ash Narayanan	Erin Hunker	Lydia Statz	Leah Gifford	Sam Ricord	Griffin Laihinen	Brooke MacInnes	Abby Finis (Local Climate Solutions)		
	\$ 205.99	\$ 244.83	\$ 181.04	\$ 222.35	\$ 144.54	\$ 121.54	\$130.28	\$ 200.00		
Task 1: Project Launch and Management	15	0	9	0	0	0	0	0	24	\$ 4,719.21
Task 2: Existing Conditions Report	12	4	18	6	20	8	8	3	79	\$ 13,549.38
Task 3: City Operations Strategy Development	14	2	12	0	0	0	0	18	46	\$ 9,146.00
Task 4: Resilience and Implementation Plans	23	0	24	0	8	3	0	28	86	\$ 16,203.67
Task 5: Final Report Development	6	2	6	1	8	8	6	12	49	\$ 8,344.51
Total									284	\$ 51,962.77





PERFORMANCE DRIVEN DESIGN



WAYZATA CITY OPERATIONS RESILIENCE PLAN

CITY OF WAYZATA

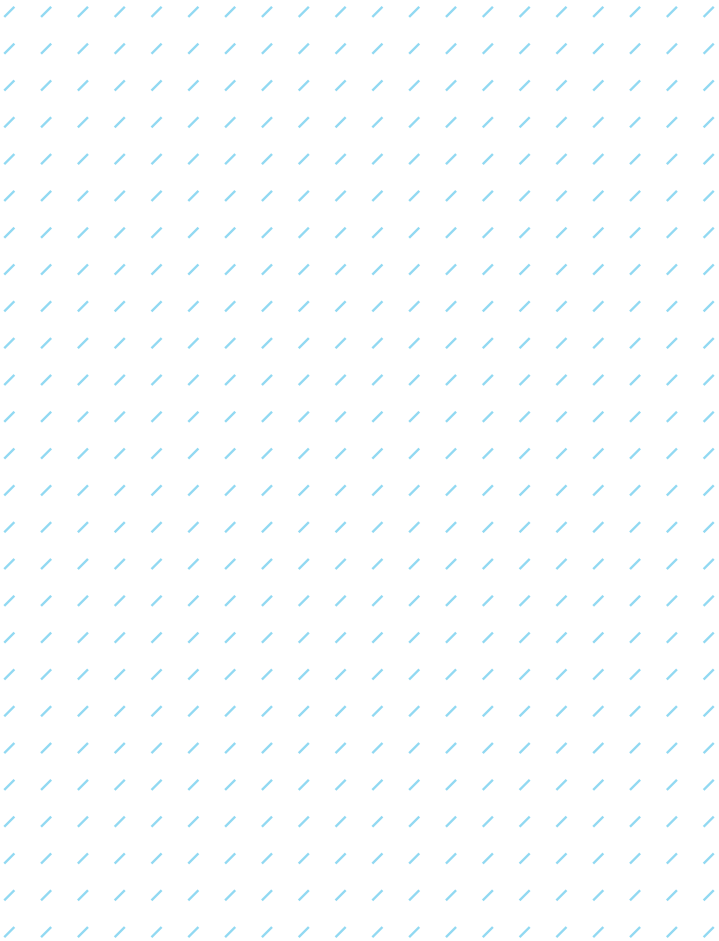
October 16, 2024



MAUREEN COLBURN, AIA,
LEED AP BD+C

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Suite 200
Minneapolis, MN 55401

Maureen.Colburn@LHBcorp.com
d 612.752.6954



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Wayzata City Operations Resilience Plan

October 16, 2024

Nick Kieser
Parks and Environment Planner
City of Wayzata
600 Rice Street East
Wayzata, MN 55391
Submitted via email -
nkieser@wayzata.org

Dear Nick and Selection Committee Members:

A year ago, our colleague Lydia Major reached out to recommend that the City of Wayzata pursue a Local Climate Action grant through the MPCA that could fund a City Operations Resilience Plan. Focusing on policies and programs within the city's purview, this plan will include strategies to increase the city's resilience to our changing climate. Our team at LHB is excited about the opportunity to assist the city in addressing its climate-related challenges and achieving its long-term resiliency goals.

Our expertise spans several key areas critical to the success of this project:

- 1. Climate Vulnerability Assessment:** Our team has extensive experience in conducting thorough climate vulnerability assessments for cities and municipalities. This process will allow us to identify the key risks that Wayzata faces, ranging from extreme weather events to long-term shifts in climate patterns. By understanding these vulnerabilities, we can better equip the city to manage risks effectively.
- 2. Greenhouse Gas Inventory for City Operations:** We will conduct a detailed greenhouse gas (GHG) inventory, focusing specifically on emissions from city operations. Our expertise in GHG accounting will ensure that the inventory accurately reflects the city's operational emissions and provides a foundation for targeted mitigation efforts.
- 3. Strategies for Resilience, Adaptation, and Greenhouse Gas Reduction:** Based on the findings from the vulnerability assessment and GHG inventory, our team will develop actionable strategies to enhance the city's resilience to climate impacts. We will identify adaptive measures that Wayzata can implement to protect its infrastructure and services in the face of a changing climate.
- 4. City Operations Resilience Plan with Implementation Strategy:** Our goal is to deliver a comprehensive City Operations Resilience Plan that not only outlines strategies for climate adaptation and mitigation but also includes a practical and achievable implementation plan. This will provide the city with a clear path forward, outlining key steps, timelines, responsibilities, and metrics for tracking progress.

We are committed to working closely with the City of Wayzata to ensure that the resilience plan is tailored to its unique needs and priorities. We believe our approach, combined with our experience, positions us to support Wayzata in strengthening its sustainability efforts and preparing for future climate challenges.

Thank you for considering our proposal. We look forward to the opportunity to collaborate on this critical project.

Sincerely,

LHB, Inc.

Maureen A.N. Colburn, AIA, LEED AP BD+C
Project Manager

701 Washington Avenue North, Suite 200,
Minneapolis, MN 55401

Maureen.Colburn@LHBcorp.com
d 612.752.6954

Michael A. Fischer, AIA, LEED AP
Project Principal

701 Washington Avenue North, Suite 200,
Minneapolis, MN 55401

Mike.Fischer@LHBcorp.com
d 612.752.6920



PROJECT UNDERSTANDING AND APPROACH

The City of Wayzata pursued a Local Climate Action (LCA) grant funded by the MPCA. LHB assisted the city with the grant proposal for a City Operations Resilience Plan that will include strategies for action to reduce greenhouse gas (GHG) emissions as well as increase resilience to the changing climate. The plan will be informed by analyzing existing conditions including reviewing the city's existing operational data, conducting a climate vulnerability assessment, and developing a greenhouse gas inventory for city operations. LHB's project manager will coordinate with the city's project manager to ensure MPCA LCA grant commitments are met.

LHB will lead these tasks:

- Review existing data and reports
- Conduct a climate vulnerability assessment
- Conduct a GHG inventory for city operations
- Analyze GHG data
- Identify strategies for resilience, adaptation, and GHG reduction
- Develop city operations implementation plan
- Develop city operations resilience plan

The climate vulnerability assessment will utilize Minnesota CliMAT downscaled climate project data to help identify local climate risks.

The City Operations GHG inventory will be consistent with the reporting requirements defined in the Local Government Operations Protocol for the Quantification and Reporting of Greenhouse Gas Emissions Inventories developed by ICLEI – Local Governments for Sustainability USA. Three years of data will be collected to enable calculation of associated emissions as follows:

- City will provide energy-use data for city-owned buildings, streetlights, potable water production, wastewater, and sanitary sewers.
- City will provide transportation fuel usage data by fuel type for city-owned vehicles.

- City will provide full-time equivalent data for employees. Solid waste data will be obtained from the Regional Indicators Initiative.
- City will provide potable water production data for city-owned water treatment and other facilities.
- City will provide vehicle miles traveled for official travel and employee commutes.

Through the LCA grant, the City of Wayzata will receive three years of community-wide GHG data available as a city summary on the Regional Indicators Initiative website. Although this planning effort will focus on actions that can be implemented by the city, community-wide data will help give context to the city's work on climate action/adaptation and to demonstrate the urgent need for community-wide action.

Project Coordination

LHB's project manager will coordinate with the city's project manager to ensure grant commitments are met. LHB will lead these tasks:

- Review existing data and reports
- Conduct a climate vulnerability assessment
- Analyze GHG data
- Identify strategies for resilience, adaptation, and GHG reduction
- Develop city operations implementation plan
- Develop city operations resilience plan

Contact Information for LHB's Project Manager

Maureen Colburn, AIA, LEED AP BD+C
701 Washington Ave. N., Suite 200
Minneapolis, MN 55401
Maureen.Colburn@LHBcorp.com
612.752.6954

RELEVANT EXPERIENCE

Our team has a strong history of developing ambitious plans that lead to high-impact actions and strategies. The City of St. Louis Park, for example, is one of the earliest plans completed by members of our team in 2018. Since adoption of the plan, the city has become a state leader in climate action implementation. Key efforts include:

- Adoption and execution of a building energy benchmarking program
- Update of its sustainable building policy
- Construction of a new net-zero nature center
- Implementation of residential and commercial clean energy cost-share programs
- Passing an EV charging ordinance resulting in more than 100 chargers in its first year
- Installation of public EV charging stations
- Updated bike and pedestrian plan to consider climate action plan

In addition to considering economic and equity co-benefits, these strategies and actions were selected based on their high potential impact on community-wide emissions. Our team has provided 14 years of greenhouse gas (GHG) emissions data for St. Louis Park through the Regional Indicators Initiative and is tracking their progress in comparison to the reductions outlined in their climate action plan (linked below).

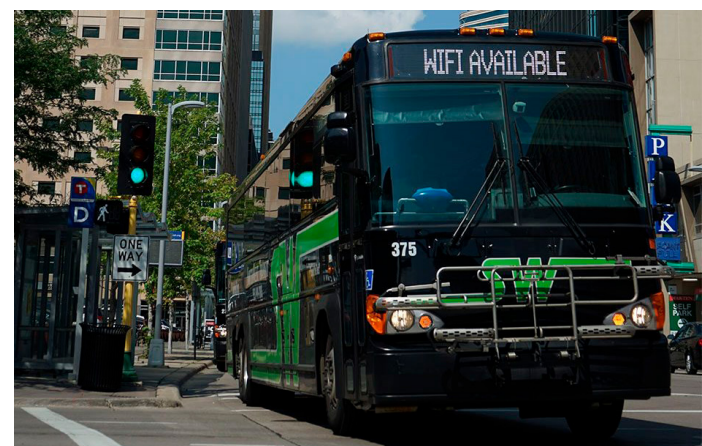
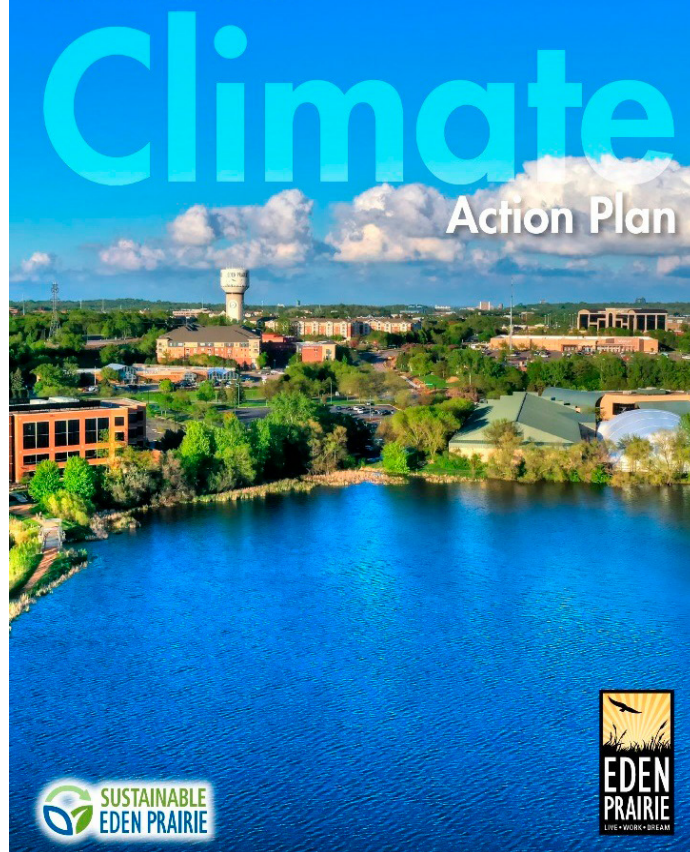
We understand that every entity has different priorities and approaches to climate and sustainability planning.

Examples of Climate Action, Sustainability, and Resilience Plans completed by LHB include:

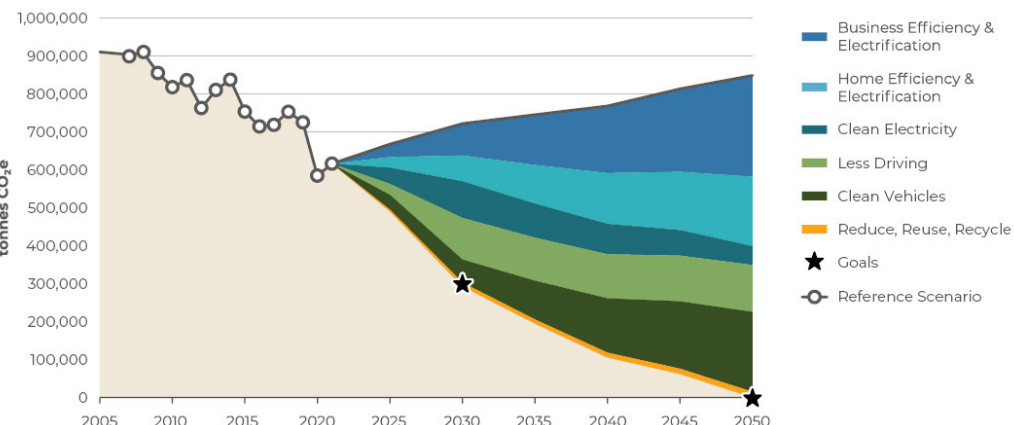
- [St. Louis Park Climate Action Plan](#)
- [Northfield Climate Action Plan](#)
- [City of Red Wing Climate Action Work Plan](#)
- [City of Eden Prairie Climate Action Plan](#)
- [Southwest Transit Sustainability Plan](#)
- [Minnetonka Climate Action and Adaptation Plan](#)
- [Cedar Falls Resilience Plan & Framework](#)

The following pages detail some of our more recent climate action and resilience plans for your consideration.

City of Eden Prairie



Images: City of Eden Prairie's Climate Action Plan (top); SouthWest Transit's Sustainability Plan (bottom)



PROJECT TYPE

Climate Action and Adaptation Plan

LOCATION

Minnetonka, MN

COMPLETION DATE

April 2024

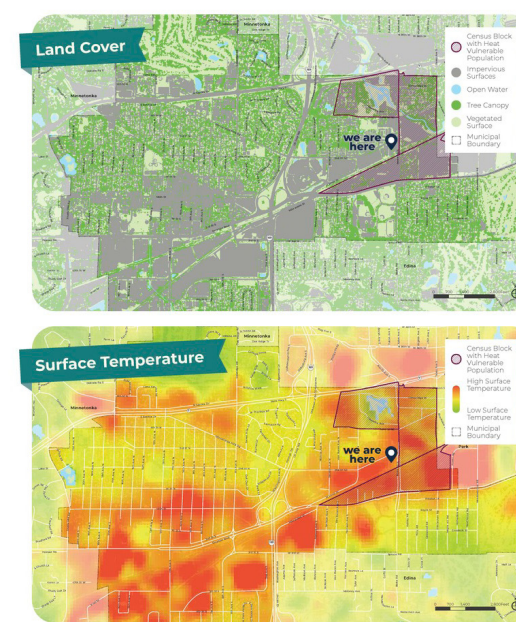
REFERENCE

City of Minnetonka
Loren Gordon
City Planner
952.939.8296
lgordon@minnetonkamn.gov

CITY OF MINNETONKA

CLIMATE ACTION AND ADAPTATION PLAN

In the fall of 2022, the City of Minnetonka's Sustainability Commission recommended the creation of a climate action and adaptation plan to serve as a comprehensive guide for how the community can reduce greenhouse gas emissions (GHGs) and adapt to a changing climate. LHB, Local Climate Solutions, and Ash Narayanan teamed up to conduct the process, which included an existing conditions analysis, an extensive community engagement process, development of goals, and documentation in a plan. The plan outlines specific strategies and actions for residents and businesses and identifies the potential for city-led policies and programs to help meet the community's goals. The project is still underway, with adoption by the City Council anticipated on Earth Day 2024.



Why is the Excelsior/Blake Road corridor so hot?

The land surface temperature is determined by a **ratio of heat generating and heat abating land covers**.

Currently, the project area is **primarily composed of heat-generating surface types** (i.e. buildings, roads/paved surfaces, etc.), which greatly contributes to the area's high land surface temperature.

A large swath of land is currently under construction for the **Green Line LRT Extension**, which will impact the surface conditions within the project area.

PROJECT TYPE

Resilience and Vulnerability Assessment

LOCATION

Hopkins, MN

COMPLETION DATE

2023

CITY OF HOPKINS

MPCA RESILIENCE GRANT HEAT VULNERABILITY STUDY

LHB and Local Climate Solutions worked closely with City of Hopkins staff to write a Minnesota Pollution Control Agency (MPCA) Planning Grant for Stormwater, Wastewater, and Community Resilience. The successful grant application proposed to conduct a Resilience and Vulnerability Assessment for the City of Hopkins, specifically focusing on the impacts of the heat island along the Excelsior and Blake Road corridors in the city.

These two corridors are home to a large majority of Hopkins' rental housing stock and many immigrant, BIPOC and low-income renters. Additionally, the construction of the Southwest light rail transit line has begun to spur dense development in these areas where most parcels already consist of largely impervious surfaces. The high degree of impervious surfaces exposes the community to many health, economic and infrastructure vulnerabilities due to extreme heat events.

The project process began by establishing existing conditions, including reviewing related documents within Hopkins and conducting a literature review of measures and practices used in other communities. The team also performed a vulnerability and resiliency assessment using GIS

data to understand existing impervious surfaces and tree canopies to inform the physical distribution of heat sensitive areas, coupled with census data and state demographic information to identify vulnerable populations.

Next the team conducted an engagement process, working closely with City staff to reach residents in these corridors, to understand how heat affects them and what would be helpful to them, as well as private landowners and public entity stakeholders, to understand their plans. The team hosted an in-person event in the neighborhood, which was well attended by residents. They also came to existing events, including the Neighborhood Night Out and a Farmer's Market. These were coupled with online surveys to reach as many people as possible.

The team is now evaluating the information gathered during this process to develop recommendations and plan next steps for funding and implementation. The project will result in a final report with strategy recommendations and an ArcGIS StoryMap that informs community members about the dangers of extreme heat, indexes vulnerabilities, and shares the recommendations to mitigate the impact of extreme heat.

HENNEPIN COUNTY GREENHOUSE GAS EMISSIONS

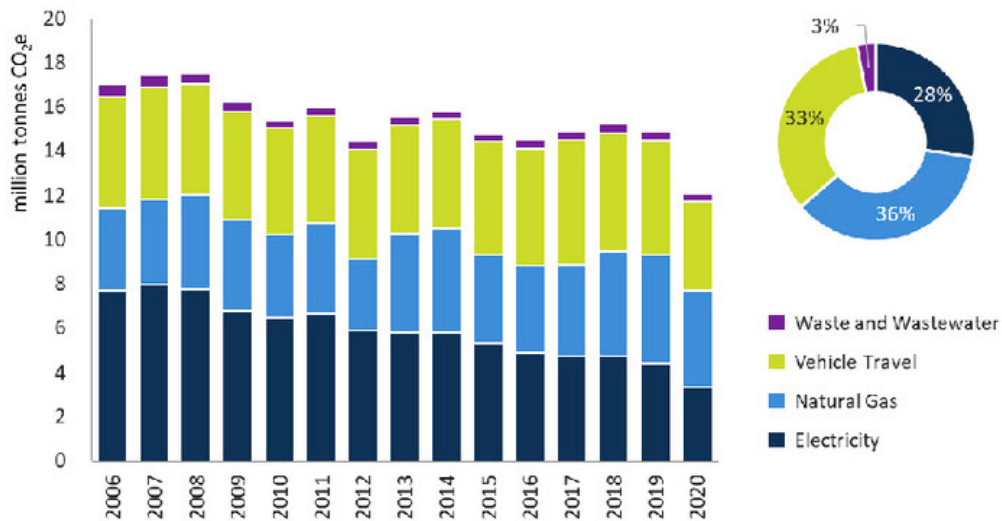
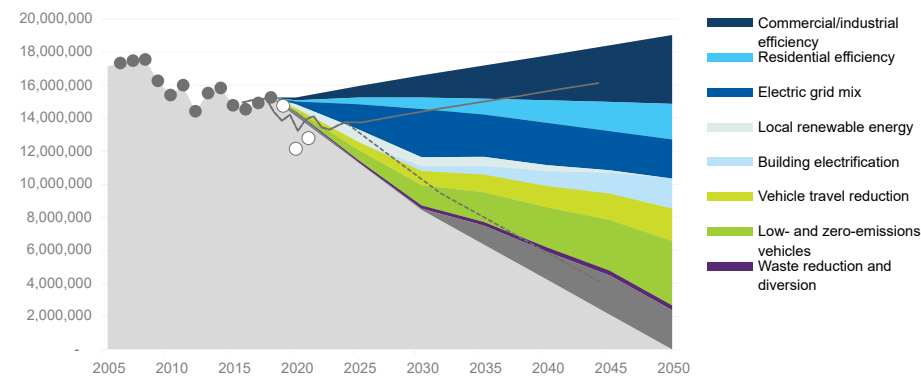


Figure 2. Hennepin County greenhouse gas emissions by activity from 2006-2020 (left) and 2020 breakdown by activity (right).

The path to achieving our greenhouse gas emission reduction goals



PROJECT TYPE

GHG Inventory and Analysis

LOCATION

Hennepin County, MN

COMPLETION DATE

Ongoing

REFERENCE

Hennepin County
Diana Chaman Salas
Director of Climate and Resilience
612.348.3000
diana.chamansalas@hennepin.us

HENNEPIN COUNTY

CLIMATE ACTION PLANNING

In 2021, Hennepin County adopted a climate action plan with an updated goal of net-zero emissions by 2050. LHB informed this work by analyzing the county's recent emissions trends, working with County staff to develop a pathway to net zero, and recommending near-term climate mitigation actions.

LHB calculated and analyzed over ten years of greenhouse gas emissions data for the county, using ICLEI's Local GHG Contribution Analysis Tool to quantify how factors such as weather, population growth, energy source changes, and local programs contributed to changes in emissions. This analysis revealed both success stories - such as the large impact of cleaner electricity - and areas to target for future action - such as natural gas usage, which increased over the study period even after accounting for growth and weather.

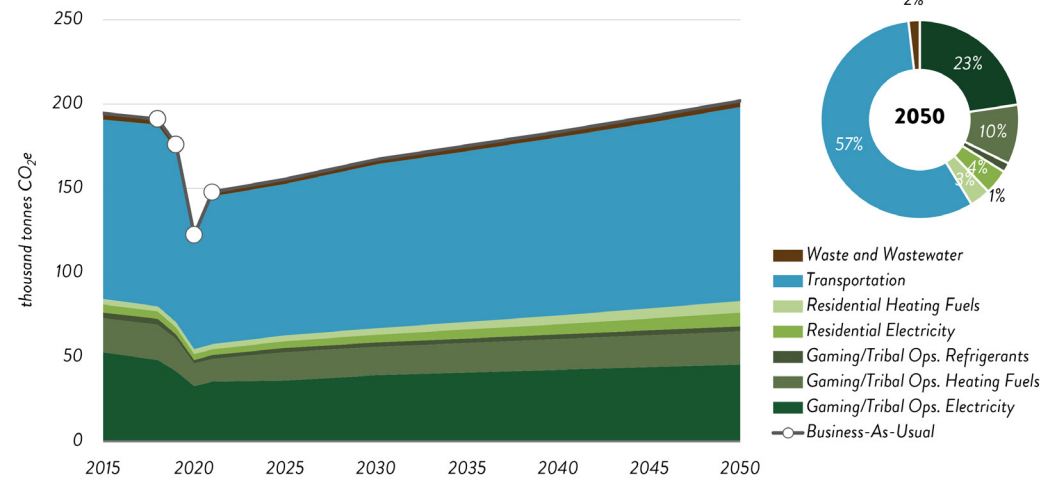
To map a feasible pathway to net-zero emissions by 2050, LHB estimated the impacts of strategies such as energy efficiency, local renewables, vehicle travel reduction, electrification of buildings and

vehicles, and carbon sequestration through land management. Engaging with county staff, LHB combined these strategies into a scenario for the future that also considers potential impacts on equity, health, resilience, and quality of life.

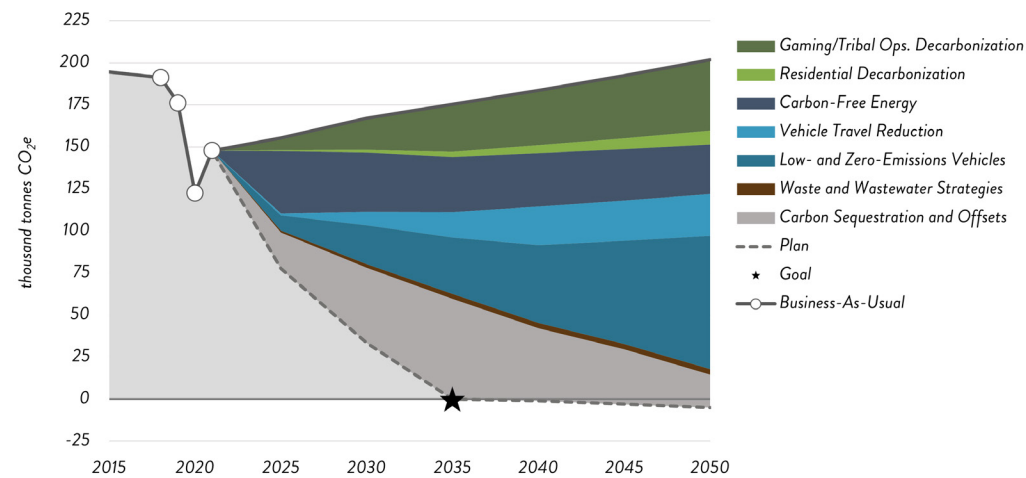
The final element of this project was to connect overarching strategies to near-term action by defining how the County is uniquely positioned to lead climate mitigation efforts through their impacts and influence as a large organization; role and responsibilities as a public entity; and long-term partnerships with the State, other metropolitan counties, cities, park districts, and community organizations.

LHB is providing ongoing services to support implementation of Hennepin County's Climate Action Plan including annual updates to the GHG inventory, recommendations for ongoing emissions tracking and communications, and quantification of key performance indicators into GHG emissions.

SMSC GREENHOUSE GAS EMISSIONS FORECAST



SMSC GREENHOUSE GAS EMISSIONS REDUCTION SCENARIO



PROJECT TYPE

Sustainability Plan & Priority Climate Action Plan

LOCATION

Shakopee Mdewakanton Sioux Community

COMPLETION DATE

Sustainability Plan 2022

Priority Climate Action Plan 2024

Comprehensive Climate Action Plan Anticipated March 2025

REFERENCE

Shakopee Mdewakanton Sioux Community
Scott Walz
Natural Resources Manager
612.387.8841
scott.walz@shakopeedakota.org

SHAKOPEE MDEWAKANTON SIOUX COMMUNITY

SUSTAINABILITY PLAN AND PRIORITY CLIMATE ACTION PLAN

Sustainability Plan

Local Climate Solutions, LHB, and Climate + Transportation Strategies LLC worked with the Shakopee Mdewakanton Sioux Community (SMSC) to complete a Sustainability Plan that included strategies to achieve carbon neutrality in the near-term and to be sustainable for the next seven generations. The plan was developed in close collaboration with community members.

Priority Climate Action Plan

LHB and Local Climate Solutions assisted in the development of SMSC's Sustainability Plan and will leverage this work to complete a Priority Climate Action Plan that will support SMSC's commitment to achieving carbon neutrality by 2035. LHB's services included:

- Leading team coordination, meeting facilitation, document sharing set-up and maintenance
- Leading GHG inventory and GHG emissions projections updates
- Leading quantification of GHG reduction measures and benefits analysis
- Supporting identification of funding opportunities
- Supporting stakeholder engagement efforts
- Leading development of approach and tools for tracking climate work plan and outcomes
- Participating in Climate Innovation Team meetings
- Drafting quarterly and final reports for the grant



PROJECT TYPE
Climate Action Plan

LOCATION
Cedar Rapids, IA

COMPLETION DATE
Fall 2021

CITY OF CEDAR RAPIDS

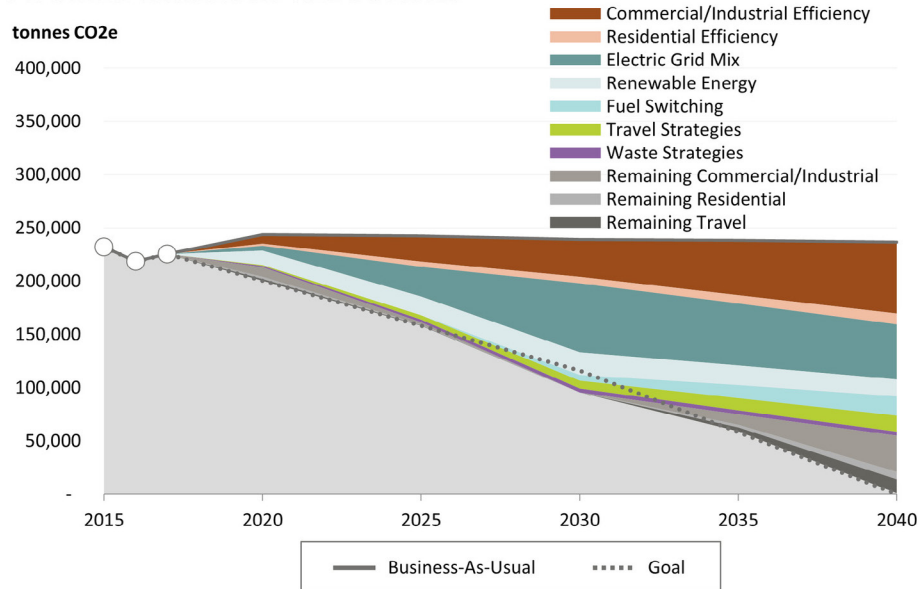
COMMUNITY CLIMATE ACTION PLAN

The Cedar Rapids Community Climate Action Plan (CCAP) was completed in the Fall of 2021 after a 9-month engagement and plan development process. This project was led by Abby Finis of Local Climate Solutions (while at the Great Plains Institute) along with LHB. The plan was developed to achieve the goals of the city's climate resolution to reduce greenhouse gas emissions across sectors, build resilience to climate hazards, and to support access to basic needs for all residents.

The CCAP includes 24 actions with two key goal areas and visions. The first goal is to be carbon-free. Under this goal actions are aimed at reducing emissions and harms to health through building energy efficiency and clean energy, clean mobility options, and addressing industrial emissions. The second goal addresses resilience and accessibility and supports a Cedar Rapids where all residents have access to high-quality spaces, healthy food, clean air and water, and good, green jobs.

This plan was developed with a robust engagement process. This included regular convenings of the Climate Advisory Board which both served to guide the plan, and to help extend outreach to underrepresented communities. The project team also hosted focus group conversations with large industrial users, neighborhood groups, institutions, and small businesses. This plan was developed with community buy-in and commitment.

PLANNED EMISSIONS REDUCTIONS



PROJECT TYPE
Climate Action Plan

LOCATION
Northfield, MN

COMPLETION DATE
November 2019

CITY OF NORTHFIELD

NORTHFIELD CLIMATE ACTION PLAN

In partnership with LHB, the Great Plains Institute led the development of the City of Northfield's Climate Action Plan: Carbon Free 2040. The plan was adopted November 2019 by the City Council. The final plan commits to achieving 100% carbon-free electricity by 2030 and being a 100% carbon-free community by 2040. Developed in deep collaboration with the community members of Northfield, the plan underwent multiple rounds of community engagement during development. The final plan demonstrates Northfield's commitment to both emission reductions and climate change mitigation, as well as adaptation and resilience. Great Plains Institute directly supported city staff during outreach and engagement with diverse community members, including local students from both local high schools, as well as the two universities in the city.

The plan includes strategies to enhance the resilience of the community by cultivating and supporting social cohesion, forward-looking stormwater management and infrastructure planning, 21st century electric grid updates, and supporting local food efforts. The actions outlined address six core areas: materials and waste, energy, land, food, water and wastewater, and transportation. Strategies and actions were aimed at emissions reduction potential as well as implications for equity and community priorities. The plan also set forward an explicit implementation agenda with responsibilities for both the city and community members to collaborate on climate action.

The full report can be read [here](#).

Figure 7 - Planned Emissions

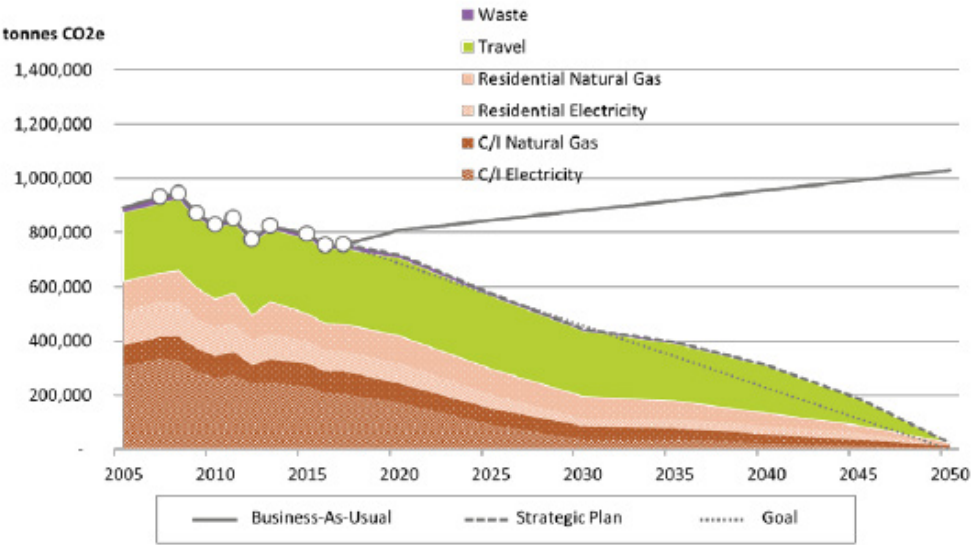
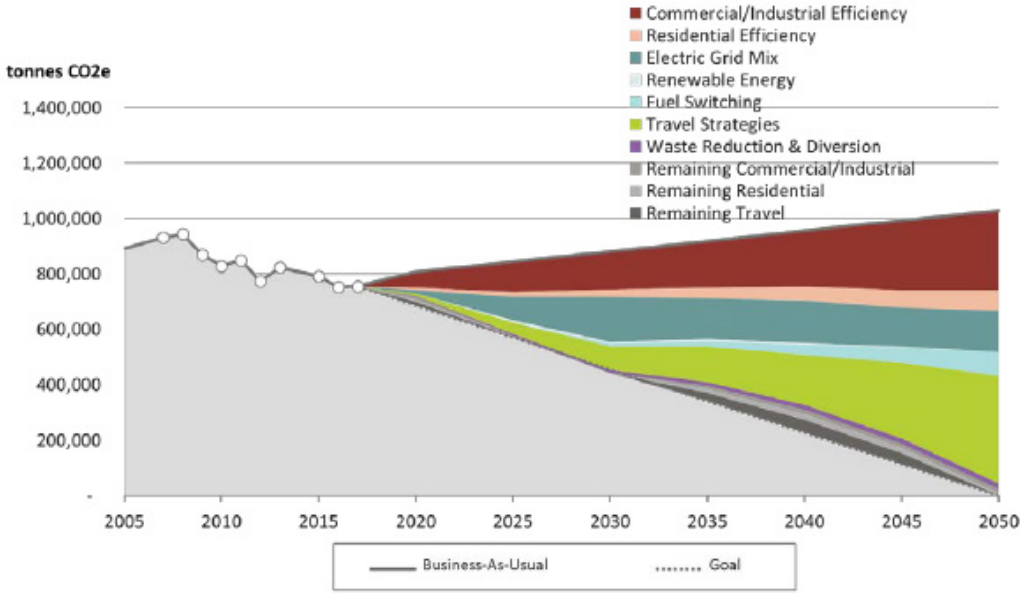


Figure 2 - Planned Emissions Reduction



PROJECT TYPE
Climate Action Plan

LOCATION
Eden Prairie, MN

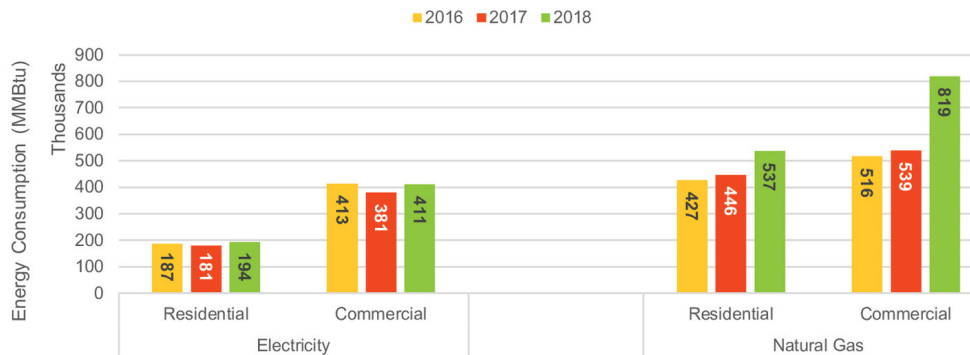
COMPLETION DATE
Ongoing

REFERENCE
City of Eden Prairie
Jennifer Fierce
Sustainability Coordinator
952.949.8313
jfierce@edenprairie.org

CITY OF EDEN PRAIRIE
CLIMATE ACTION PLAN

LHB helped chart a pathway toward the city's goal of community-wide carbon-neutrality by 2050 by estimating the impact of various efficiency and decarbonization strategies. Key strategies at the building scale – such as designing all new buildings to meet net-zero energy standards – are joined by strategies such as green power purchase and increased adoption of electric vehicles. The successful implementation of Eden Prairie's Climate Action Plan strategies and actions will lead to the achievement of community-wide emissions dropping to zero by 2050.

Energy Consumption in Red Wing by Fuel and Sector



PROJECT TYPE

Climate Action Work Plan

LOCATION

Red Wing, MN

COMPLETION DATE

August 2020

CITY OF RED WING

RED WING CLIMATE ACTION WORK PLAN

The Great Plains Institute and LHB worked with the City of Red Wing to develop its Climate Action Work Plan (CAWP), which was adopted in August 2020. Red Wing became the first city to test the CAWP model, an innovative approach to climate planning. The CAWP is a shorter, more focused version of a climate action plan that enables the city to prioritize near-term initiatives to make incremental progress while working toward its longer-term climate goals.

The Red Wing CAWP includes five strategies with 13 initiatives that are to be implemented over a five-year time horizon. Like a traditional climate action plan, the CAWP contains three main sections: an existing conditions report, a greenhouse gas inventory, and a five-year work plan. The structure of the work plan includes strategies, initiatives, and actions. The strategies look to the mechanisms that are used to reduce emissions (e.g., efficiency, clean electricity, etc.). The initiatives are specific programs or policies the city will implement to deploy the strategies, such as adopting a building benchmarking policy. The actions lay out a step-by-step pathway to get started.

Supplementary materials and on-going assistance will be provided to the city to help ensure it advances its initiatives. These include community engagement resources to ensure the city is inclusive of all residents as it moves to create a more equitable and climate-friendly city. This plan is expected to reduce emissions 9% over the next five years. When combined with the impact of a cleaner electric grid and on-going building code enforcement for new construction, the emissions reductions total 21%.

The full report can be read [here](#).



PROJECT TYPE

Green Building Policy and Climate Action Plan

LOCATION

St. Louis Park, MN

COMPLETION DATE

Ongoing

REFERENCE

City of St. Louis Park
Emily Ziring
Sustainability Manager
St. Louis Park, MN
952.924.2191
eziring@stlouispark.org

CITY OF ST. LOUIS PARK

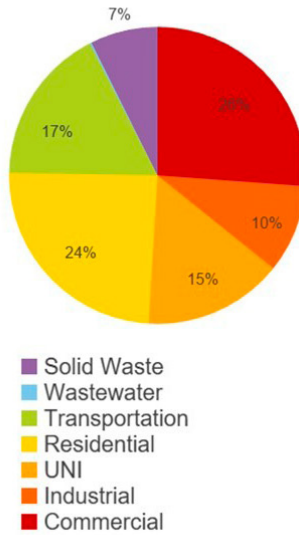
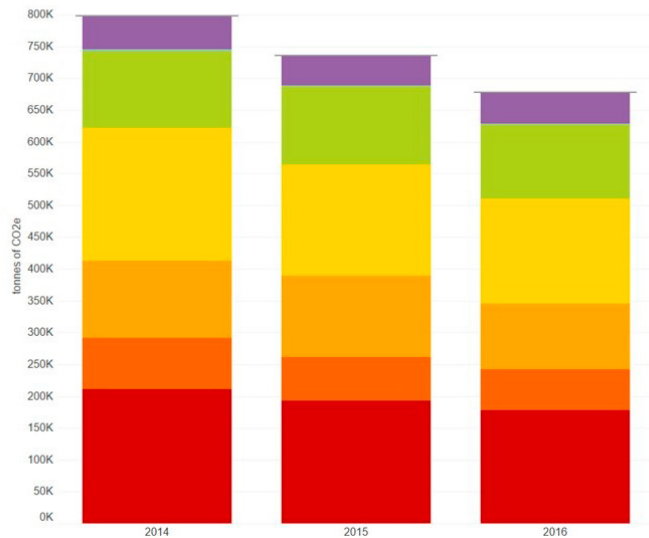
GREEN BUILDING POLICY AND CLIMATE ACTION PLAN

The City of St. Louis Park initially hired LHB to assist in implementation of their Green Building Policy, adopted in February 2010. For over 12 years, LHB has supported the City's sustainable development goals by creating tools for tracking policy compliance, leading meetings with project development/design teams to review policy requirements, and providing technical expertise on green building topics.

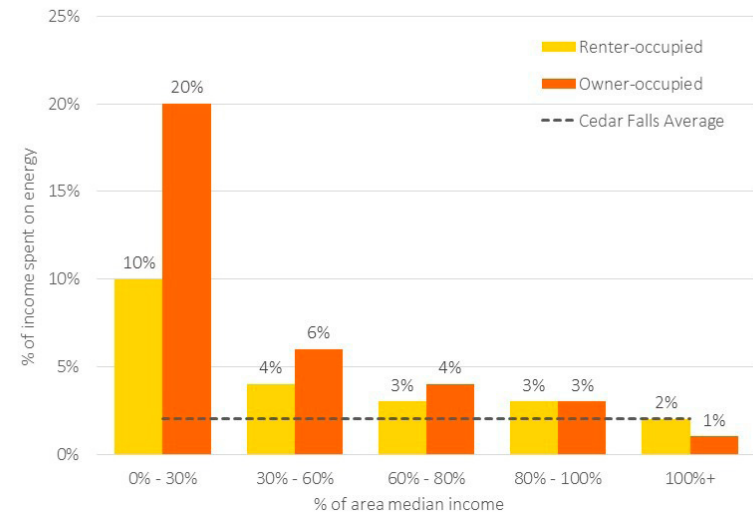
In May 2016, the City of St. Louis Park approved its climate inheritance resolution, formally marking the City's commitment to tackling climate change. St. Louis Park established a bold but achievable goal of becoming carbon neutral by 2040. Reaching this goal will require aggressive action on the part of the City, its residents, and its businesses. Knowing this, the City commissioned the Great Plains Institute, along with Orange Environmental and LHB, to assist in creating a climate action plan.

With several years of plan implementation now under their belt, the City hired LHB in 2021 to analyze progress toward their greenhouse gas emissions goals since the baseline year of 2015. We found that while the community's natural gas use remains very weather-dependent, emissions reductions have been achieved through electricity efficiency in local buildings, cleaner electricity from Xcel Energy, and lifestyle changes made during the pandemic. This analysis is now informing near-term community action, with similar "check-ins" planned in future years to ensure the city stays on track to meet its goals.

Emissions Trends



Cedar Falls Energy Burden



Right image: The average Cedar Falls household spends 2% of income on energy.
Low-income homeowners spend 20%.

PROJECT TYPE

Resilience Plan and Framework

LOCATION

Cedar Falls, IA

COMPLETION DATE

December 2020

CITY OF CEDAR FALLS & PERKINS+WILL

RESILIENCE PLAN AND FRAMEWORK

LHB was part of a team that helped the City of Cedar Falls, IA develop a Resilience Plan and Framework, which guided action to improve prosperity and stability in their community.

LHB led the carbon planning process for the project. To understand existing conditions, we analyzed the community-wide greenhouse gas inventory and identified the greatest opportunities for improvement. We used the IPCC's latest evidence related to the social, environmental, and economic impacts of climate change to inform the development of overall carbon reduction targets. We used these reduction targets to guide our scenario planning. After understanding carbon strategies at a high level, we worked with the community and developed actionable first steps to incorporate into the plan, ensuring the collective actions positively impact all populations and move the city toward greater resilience and social equity.



PROJECT TYPE

Research and Development

LOCATION

Statewide, MN

RECOGNITION

2015 ACEC MN Grand Award

COMPLETION DATE

Ongoing

REFERENCE

Minnesota Department
of Commerce
Division of Energy Resources
Dennis Duffy
Energy Data Analyst
651.292.4650
dennis.duffy@state.mn.us

REGIONAL INDICATORS INITIATIVE

LHB created and leads the Regional Indicators Initiative (RII), which provides Minnesota local governments with planning tools and actual results to measure progress toward their energy and carbon reduction goals. Initially created to collect and share community-wide data for several key metrics (energy, water, travel, waste, and greenhouse gas emissions), RII has now expanded to include additional tools that local governments can use to inform climate planning and action. The tools currently available include: data visualizations, case studies of exemplar cities, a wedge diagram tool, and energy planning templates.

The LHB-developed Wedge Tool allows users to explore a city's potential energy futures through a web-based interactive diagram that shows forecasted city-wide greenhouse gas emissions from 2005-2040. The diagram includes baseline data and a business-as-usual forecast for over 50 Minnesota communities, options to set reduction targets, and multiple reduction "wedges" that are based on actions such as implementing neighborhood outreach programs, developing new citywide regulations, and supporting statewide policies.

By inputting levels of commitment to each building-energy reduction strategy, users are able to visualize the predicted impacts in real-time and prioritize high-impact strategies. The wedge diagram is intended to be a living tool that can be adapted each year as communities learn more about the impacts of their actions. The RII tools have been shared with local governments through a series of technical webinars and in-person presentations.

Please visit the [website](#) to explore the data and learn more about the tools available for community climate action.

PROJECT TEAM

Our team brings energetic and forward-thinking experience to this project. LHB professionals offer expertise in climate, energy, and resilience planning and are committed to delivering a Resilience Plan that will include strategies for action to reduce greenhouse gas emissions as well as increase resilience to the changing climate.

"Architects and engineers play a critical role in improving the built environment's impact on natural resources and greenhouse gas emissions, and LHB is leading the way for sustainable design by making positive changes in the way buildings and sites are designed and operated."

Mahesh Ramanujam, Former President & CEO
US Green Building Council



**Maureen Colburn, AIA, LEED AP
BD+C**
Project Manager

Maureen leads LHB's Climate Solutions team and has 20 years of experience managing projects. She also has deep

experience in energy and climate research and analysis, stakeholder facilitation, state and local regulatory authorities, and program implementation. Maureen works on state, regional, and local planning initiatives to drive greenhouse gas emissions reductions, while improving local economic conditions, and achieving a quality of life for all. For this project, Maureen will coordinate the team and lead the creation of the Resilience Plan. She will also support the existing conditions assessment, strategy development, and development of the implementation and final plans.

Maureen has completed the following resilience and climate action plans and similar projects that include:

- Shakopee Mdewakanton Sioux Community Priority Climate Action Plan
- City of St. Louis Park Climate Action Plan and Green Building Policy
- SouthWest Transit Agency Sustainability Plan
- City of Northfield Climate Action Plan
- City of Eden Prairie Climate Action Plan
- City of Edina Sustainable Building Policy Implementation
- Hennepin County Climate Action Planning
- Saint Paul Port Authority The Heights Carbon Free Community Planning
- Regional Indicators Initiative
- Ramsey County Rice Creek Commons



Lydia Major, PLA, LEED AP
Landscape Architecture and
Planning Focus Leader

Lydia works with clients and communities to plan and create vibrant public, commercial, and residential places.

She uses a collaborative design process to develop solutions that benefit the client, the community, and the environment. Her projects include community, education, park, trail, and infrastructure system planning projects. Lydia will conduct Wayzata's climate vulnerability assessment and recommend strategies related to increasing the tree canopy, native landscaping, and emergency preparedness.

Lydia has worked on the following resilience and climate action plans and similar projects:

- City of Minnetonka Climate Action and Adaptation Plan
- City of Hopkins PCA Resilience
- MnDOT Plan Mitigating Effects of Climate Change on Pedestrians
- Saint Paul Port Authority The Heights Carbon Free Community Planning



Rebecca Alexander, AIA, WELL AP
Senior Researcher and Carbon Planner

As the primary researcher for the Regional Indicators Initiative for over ten years, Becky has led the development

of RII GHG inventories and scenario planning tools and played a significant role in the development of several climate action/mitigation plans. She is also involved in several other significant state-wide initiatives to reduce greenhouse gas emissions and improve sustainability in the built environment, such as Minnesota's B3 program, which are informed by her background as an architect. Becky's role on this project will be to calculate and analyze Wayzata's GHG emissions from city operations and recommend strategies for reducing energy, water, and waste in city-owned buildings.

Becky has worked on the following resilience and climate action plans and similar projects:

- Shakopee Mdewakanton Sioux Community Sustainability Plan and Priority Climate Action Plan
- City of Minnetonka Climate Action and Adaptation Plan
- SouthWest Transit Agency Sustainability Plan
- City of Cedar Rapids, IA Climate Action Plan
- City of Northfield Climate Action Plan
- City of Eden Prairie Climate Action Plan
- Hennepin County Climate Action Planning
- Saint Paul Port Authority The Heights Carbon Free Community Planning
- Regional Indicators Initiative
- City of Red Wing Climate Action Work Plan
- City of St. Louis Park Climate Action Plan
- City of Cedar Falls, IA Resilience Plan
- Ramsey County Rice Creek Commons
- St. Paul Municipal Buildings Decarbonization Plan



Jess Vetrano, PLA
Landscape Architect and GIS Specialist

Passionate about public space design, green stormwater infrastructure, bicycle and pedestrian infrastructure, master

planning, community engagement, and traveling, Jess has worked on a variety of projects with local governments. She will support Wayzata's City Operations Resilience Plan through review of GIS data, forestry and parks plans, conducting the climate vulnerability assessment, and development of the draft and final plans.

Jess has worked on the following resilience and climate action plans:

- City of Minnetonka Climate Action and Adaptation Plan
- City of Hopkins PCA Resilience
- MnDOT Plan Mitigating Effects of Climate Change on Pedestrians
- Saint Paul Port Authority The Heights Carbon Free Community Planning
- City of Hopkins Resiliency Hub



Brad Reifsteck, PE
Senior Civil Engineer

Brad brings over 30 years of civil engineering experience designing and coordinating complex municipal projects.

He collaborates with teams to plan, design, and provide construction administration services for infrastructure projects including trails, streets, utilities, and storm water management. For this project, Brad will review the condition of existing utility infrastructure and recommend strategies for improving its resilience to the impacts of climate change.

Brad has worked with several cities and counties on engineering projects to improve their infrastructure and communities such as:

- City of Edina Initiating the West Promenade
- City of Duluth Junction Street Reconstruction
- City of Grant City Engineer and Master Services Agreement
- City of Grant Knollwood Drive Improvements
- Olmsted County Housing and Redevelopment Mayowood II
- Pine City Public Schools Adult Learning Center
- Dakota County North Creek Greenway
- Dakota County Household Hazardous Waste and Recycling Facility
- School District of Amery Athletic Complex
- City of North St. Paul 2023 McKnight Watermain Improvements*
- City of North St. Paul 2022-2023 Street Improvements Project*
- City of North St. Paul 7th Avenue Corridor*
- City of Long Lake City Engineer*
- City of Excelsior 2019-2021 Street Reconstruction Projects*
- City of Excelsior Water Street Overlay Improvements*
- City of North St. Paul 2020 Street Reconstruction Project*
- City of Mendota Heights 2018 Street Improvements*

**While employed with WSB*



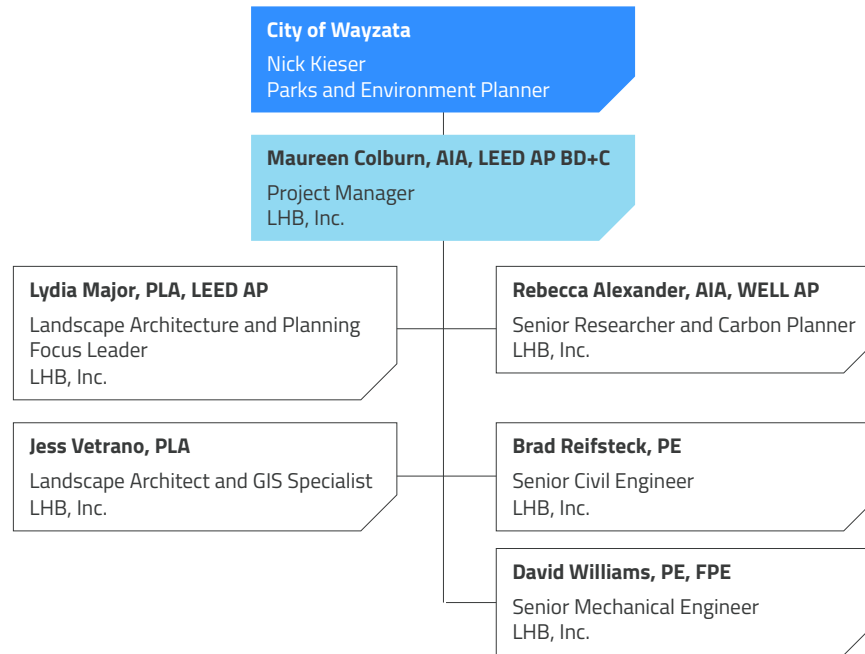
David Williams, PE, FPE
Senior Mechanical Engineer

With over 41 years of mechanical design experience, David oversees building performance services such as LEED consultation, energy modeling, life-cycle cost analysis, commissioning, building maintenance, solar energy systems, unique/special system design, and sustainability strategies. David will recommend electric vehicle infrastructure solutions, ensuring seamless integration and sustainable transportation options for the future.

David has worked on the following resilience and climate action plans and similar projects:

- SouthWest Transit Agency Sustainability Plan
- Saint Paul Port Authority The Heights Carbon Free Community Planning
- Ramsey County Rice Creek Commons
- University of Minnesota, Sustainable Buildings 2030
- Regional Indicators Initiative
- St. Paul Municipal Buildings Decarbonization Plan

Organizational Chart



LHB Climate Solutions Team: Driving Regional Greenhouse Gas Reductions Through Innovative Strategies

LHB's Climate Solutions team focuses their work on achieving regional greenhouse gas emission reduction targets through a range of projects from the building to state scales. They address key categories including climate, wellness, water, resources, ecology, prosperity, and community to help clients identify and meet their sustainability goals.

For over ten years, LHB has led the region in promoting data-driven community greenhouse gas emissions reductions. Their expertise in collecting, tracking, and communicating data in communities throughout Minnesota through the creation and leadership of the Regional Indicators Initiative (RII) will enable our team to provide insights into the City of Wayzata's GHG data and clearly communicate the findings to the city.

Utilizing the RII Wedge Tool, LHB works with local governments across the region to quantify the impact of building, transportation, and waste strategies on greenhouse gas emission reductions to inform community planning. Lessons learned from climate planning work for the cities of Hopkins, Eden Prairie, St. Louis Park, Red Wing, and Northfield, MN and Cedar Rapids and Cedar Falls, IA will be applied to Wayzata's City Operations Resilience Plan.

SCHEDULE

DESCRIPTION	NOV 2024	DEC 2024	JAN 2025	FEB 2025	MAR 2025	APR 2025	MAY 2025	JUNE 2025
Biweekly meetings between consultant and city project manager	Project kick-off							
Review existing data and reports	Gather information and begin review	Continue review	Summarize findings for existing conditions report	Gather feedback from city depts, incorporate feedback				
Climate vulnerability assessment	Start assessment	Continue assessment	Summarize findings for existing conditions report					
Analyze city operations GHG emissions	Start data collection	Continue data collection	Continue data collection and analysis	Incorporate feedback from city staff, summarize findings				
Strategy development				Develop strategies and actions based on city staff input	Meet with city staff to get input on strategies and actions; Categorize actions into near- or long-term.	Finalize strategies and actions.		
Develop draft and final Resilience Plan					Draft plan including existing conditions, draft strategies	Update plan based on city feedback, add strategies	Complete plan draft	Incorporate feedback from city staff into final plan and submit.
Develop Implementation Plan						Start development of implementation details for near-term actions.	Complete development of implementation details for near-term actions.	Incorporate feedback from city staff into final plan and submit.

PROPOSED FEE

TASKS	MAUREEN COLBURN	LYDIA MAJOR	BECKY ALEXANDER	JESS VETRANO	BRAD REIFSTECK	DAVID WILLIAMS	LHB SUPPORT	TOTAL
Task 1 Project Launch and Management								\$4,180
1.1 Project launch and coordination	12							
1.2 Regular updates with city's project manager (up to 16 half-hour virtual meetings)	8							
Hours	20	0	0	0	0	0	0	20
Task 2 Existing Conditions Assessment								\$25,950
2.1 Review existing data and reports	6	6	8	36	8	10	16	
2.2 Conduct a climate vulnerability assessment	4	8	0	20	0	0	20	
2.3 Analyze GHG data	0	0	16	0	0	0	61	
Hours	10	14	24	56	8	10	97	219
Task 3 City Operations Strategy Development								\$13,778
3.1 Identify strategies for resilience, adaptation, and greenhouse gas emissions reduction	7	10	12	25	12	10	12	
Hours	7	10	12	25	12	10	12	88
Task 4 Resilience and Implementation Plans								\$8,054
4.1 Develop city operations implementation plan	4	2	2	0	0	0	20	
4.2 Develop city operations resilience plan	6	4	2	24	0	0	0	
Hours	10	6	4	24	0	0	20	64
Personnel Total Hours	47	30	40	105	20	20	129	391
Personnel Hourly Rates	\$209	\$212	\$151	\$107	\$223	\$212	\$129	
TOTAL FEE NOT TO EXCEED	\$9,823	\$6,360	\$6,040	\$11,235	\$4,460	\$4,240	\$9,804	\$51,962

Optional Additional Services

- Travel time if meetings noted as virtual are requested to be in person - Hourly per rates in table
- Participation in additional meetings / public engagement not noted above - Hourly per rates in table

Notes

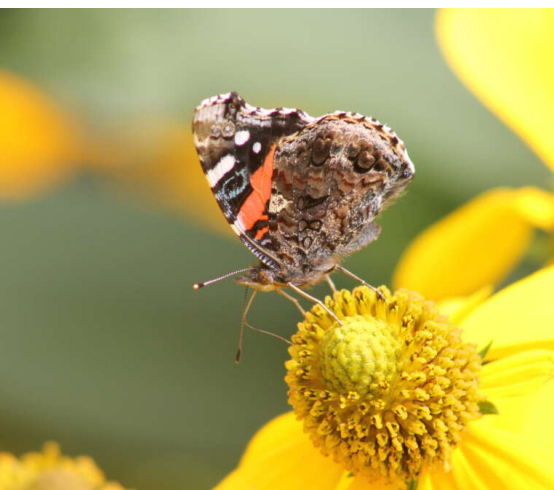
- Flood risk scope is not included
- Request for community-wide data (costs to be covered by MPCA)



MAUREEN COLBURN,
AIA, LEED AP BD+C

701 Washington Avenue North
Suite 200
Minneapolis, MN 55401

Maureen.Colburn@LHBcorp.com
d 612.752.6954



TOMORROW'S DESIGN TODAY

We approach challenges with curiosity and passion. Our team is committed to putting forth the best of ourselves and bringing out the best in each other to create a better tomorrow.

LHBCORP.COM



wsb

A PROPOSAL FOR

Wayzata City Operations Climate Adaptation and Resiliency Plan

FOR THE CITY OF WAYZATA

October 22, 2024



Nick Kieser
City of Wayzata
600 Rice Street East
Wayzata, MN 55391

Re: City of Wayzata Climate Planning Proposal

Dear Nick:

WSB is pleased to provide this proposal for developing a Climate Adaptation and Resiliency Plan (CARP) for the City of Wayzata. WSB understands that the City is seeking support to provide capacity and expertise to advance the environmental sustainability guiding principle in the Wayzata Comprehensive Plan. WSB has a well-qualified team with extensive experience, a solid relationship with the City, and diverse knowledge in climate and resilience planning. We will help to create a plan that will come to life and not just sit on a shelf.

■ **Broad Municipal Expertise**

WSB works with hundreds of cities on topics such as resilience and climate planning, policy writing, stakeholder engagement, ordinance and zoning development, operational management, renewable energy, energy and water conservation, comprehensive planning, public works, city engineering, natural resource management, landscape architecture, transportation, traffic planning and other infrastructure services. Our multi-disciplinary work helps us understand the interplay, roles, drivers, context and implications for community and operational planning. Because of the breadth and depth of our municipal work over the decades, we have an umbrella view, providing us perspective as third party experts.

■ **Climate and Resiliency Planning Thought Leadership**

The City has made a commitment to resiliency and sustainability and the WSB team will enhance these efforts. Working across systems, departments and services to advance the business case for climate planning is integral to the approach for all projects. Based on our roles such as serving as staff liaison to a City Environment Commission, writing and implementing Climate Plans through energy, transportation, and waste projects, our local, regional and national lens enables us draw upon the experience of other communities and tailor their learnings to benefit Wayzata.

■ **Local Knowledge & Roots**

Our team has deep experience serving communities in Minnesota, including work currently being conducted day-to-day for Wayzata on community planning, water resources, landscape architecture and beyond. Furthermore, thinking about the City's place in the metropolitan area and region, the City will benefit from our extensive relationship with the County, state agencies, adjacent and other peer cities. These roots help us have an understanding of the local conditions. We will use our experience gained from local community work to explore practical approaches to advance City goals.



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Firm Overview



Forge ahead.

WSB is a design and consulting firm specializing in engineering, community planning, environmental, and construction services. Together, our staff improves the way people engage with communities, transportation, infrastructure, energy and our environment. We offer services that seamlessly integrate planning, design and implementation.

We share a vision to connect your dreams for tomorrow to the needs of today—the future is ours for the making.

1,400+
STAFF

50+
SERVICE AREAS

45+
OFFICES

10
STATES

Alternative Project Delivery | Asset Management | Biogas | Bridges & Structures | City Engineering | Community Planning | Constructability Review | Construction Materials Testing & Special Inspection | Contractor Modeling | Drinking Water | Economic Development | Environmental Compliance | Geohazard Risk Management | Geospatial | Geotechnical Engineering | GIS Services | Grants & Funding | Health & Safety Compliance | Intelligent Transportation Systems | Investigation & Remediation | Land Development | Landscape Architecture | Managed Services | Natural Resources | Pavement Management | Pipeline | Project Management & Construction Administration | Public Engagement | Public Works Management | Right of Way | Roadway Design | Smart Cities | Solar | Survey | Sustainability | Technology Solutions | Traffic Engineering | Transit Planning | Transportation Planning | Urban Design | Vibration Monitoring | Visualizations | Water Resources | Water Reuse | Wind



Project Approach

The project will be structured as a collaboration with City staff, City Council, Energy and Environment Steering Committee members, utility partners, and other key operational stakeholders.

WSB will ensure the CARP is actionable, responsive to current needs and aligned with City priorities. Our straightforward, pragmatic, yet inclusive approach will guide the effort to set the stage to inform future decisions on capital investments, potential pilot projects, training and education opportunities, and operational procedures. The Plan will strive to advance co-benefits, such as cost reduction, economic development, and risk management that result from multi-year and cross-system planning.



We will provide coordination of the overall process, conduct assessments, identify strategic goals, engage city leaders and develop implementation plans.

Scope of Work



WSB will provide the following services for the development of a CARP:



TASK 1:

Coordination and Project Management

- Facilitate overall plan process to ensure project is on time and on budget
- Conduct initial project meeting with City Staff, Energy and Environment Committee, and other requested stakeholders to establish communication protocols, timelines, and deliverable expectations for project success
- Coordinate regular bi-weekly or monthly meetings with staff to review projects and check-in on priorities
- Facilitate efforts of Committee, City Staff, and other technical experts
- Work with City Staff and Committee to prepare for spring 2025 work sessions, including drafting slides or other materials for discussions to guide the process
- Provide overview of Draft Plan to Committee and Council for adoption. Present Final Plan at a May 2025 Council meeting for review and approval
- Coordinate with staff on MPCA reporting requirements



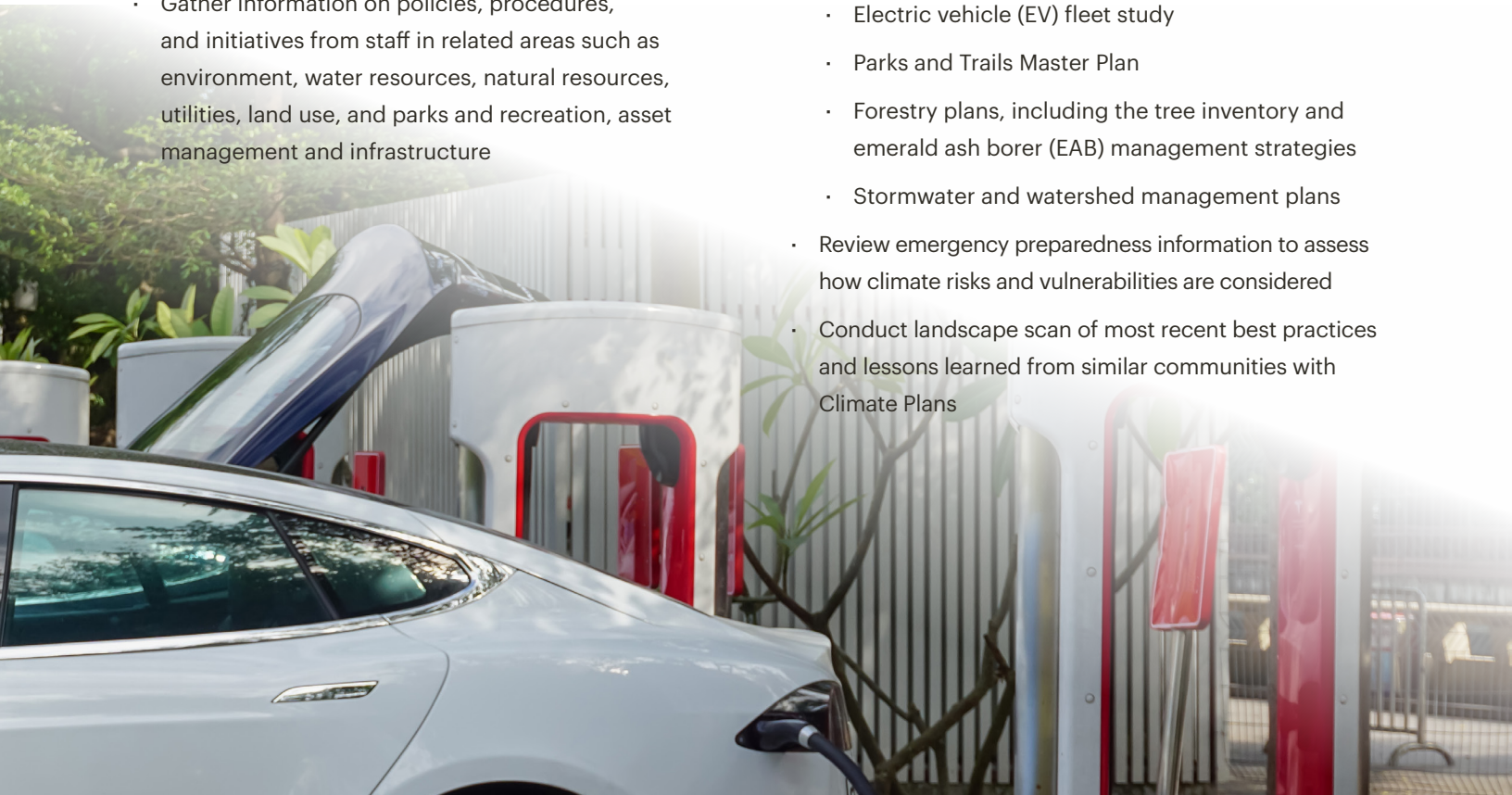
TASK 2:

Existing Conditions Report

Task 2A: WSB will conduct a thorough review of the City’s relevant initiatives, policies, procedures, infrastructure, other assets and resiliency-specific efforts. This will help identify vulnerabilities, opportunities for mitigation, and areas for consideration in later tasks.



- Engage with local stakeholders (City officials, department heads) to gather knowledge and input on current conditions and practices in place
- Gather information on policies, procedures, and initiatives from staff in related areas such as environment, water resources, natural resources, utilities, land use, and parks and recreation, asset management and infrastructure
- Gather and review existing plans to evaluate the City’s current progress, via:
 - Energy Action Plan
 - Electric vehicle (EV) fleet study
 - Parks and Trails Master Plan
 - Forestry plans, including the tree inventory and emerald ash borer (EAB) management strategies
 - Stormwater and watershed management plans
- Review emergency preparedness information to assess how climate risks and vulnerabilities are considered
- Conduct landscape scan of most recent best practices and lessons learned from similar communities with Climate Plans



Task 2B: WSB will leverage the reviewed data above to perform a comprehensive vulnerability assessment, identifying how climate risks—such as extreme precipitation, severe weather events, and shifting resource availability—may impact City operations.



- WSB will utilize publicly available tools and resources in conjunction with City-wide data to conduct an initial vulnerability assessment of City operations. Tools and resources include but are not limited to: the University of Minnesota's Climate Adaption Partnership (MCAP) Climate Data Tools, MN DNR Climate and Hydrology Dashboard, MN DNR Watershed Health Assessment Framework, MPCA Climate Risk Screening Tool, MPCA Green Infrastructure Mapping Tool, MN Geospatial Commons Data, and the U.S. Climate Resilience Toolkit
- Evaluate vulnerability of critical City assets, focusing on infrastructure and services at risk from climate change. The following services are examples and will be fully fleshed out through discussions with City staff and stakeholders: Emergency services, energy infrastructure, transportation infrastructure, water supply, stormwater systems, fire policy and health services
- Using data gathered and tools available, we will systematically assess how climate-related risks could impact key aspects of City infrastructure, assets, and services, such as:
 - Evaluating how rising, extreme or highly variable temperatures create risks to the City operations and infrastructure via strained energy grids, or impacts to other critical assets
 - Assessing how extreme and increasingly volatile weather events such as flooding, storms, and droughts may present risks to water supply, emergency response, and other municipal services
- Results of the vulnerability assessment will be summarized for the CARP





Task 2C: WSB will conduct a comprehensive **greenhouse gas (GHG) emissions inventory** for City operations



Gather data

- Gather, review, and consolidate all relevant data across all municipal operations
 - Identify city-owned and operated categories (such as buildings and energy, water and wastewater, transportation, and waste)
 - Work with City Staff to gather energy bills from Xcel Energy for city-owned buildings leveraging what is included in the Energy Action Plan
 - Work with City Staff to gather water data via water billing records
 - Work with City Staff to gather information on City-owned fleets and equipment, building on what is already available in the EV fleet study
 - Gather existing data from the City (such as GIS data) to evaluate the condition and capacity of the City's utility and transportation infrastructure

Calculate GHG Inventory

- Utilizing data previously gathered, WSB will review building and energy use, water and wastewater data, transportation, waste, and other identified categories
 - Compare the City's GHG data to national and regional benchmarks. This analysis will help inform targets and strategies for future reductions in the final CARP
 - GHG inventory tools may include one or more of the following: ICLEI ClearPath, EPA's Local Greenhouse Gas Inventory Tool, Minnesota's B3 Benchmarking Tool, Regional Indicators Initiative, or others
- Review previously gathered data from Task 2A, the City, and MPCA, and identify data gaps to complete a comprehensive analysis of the City's operational GHG inventory
- Data will be analyzed to compile a GHG inventory for City operations

Summarize Findings for the CARP

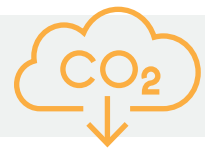
- Summarize GHG inventory for the CARP



TASK 3:

Develop Operational Strategies for Resilience, Adaptation, and GHG Emissions Reduction

WSB will explore **GHG reduction strategies**.



We will work with the Committee, Council and City Staff to develop overarching visions and strategies for each identified category to reduce the City's operational GHG emissions such as buildings and energy, water and wastewater, transportation, and waste. Strategies will be informed by engagement, but could include ideas such as:

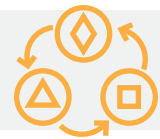
- Visions for the CARP could include a 40% reduction in GHG emissions by 2030, or net zero by 2050, or for all critical City operations to be resilient by 2040, or other similar high level goals
- Strategies for reducing emissions from buildings and energy could include weatherization and other building conservation investments, purchasing higher efficiency and all-electric appliances, installing heat pumps or geothermal heating, increasing use of renewable energy through solar garden subscriptions, on-site solar or utility green tariffs, and other ideas generated during the project
- Water and wastewater strategies may include revising existing policies that incentivize water conservation and water quality practices, enhancing stormwater management systems, ensuring sustainable landscaping practices, or installing smart meters and/or rainwater harvesting systems at City-owned facilities
- Transportation emission reduction strategies could include identifying funding for phasing in of low or no emissions vehicles as pilot projects, enhancing EV charging infrastructure for city fleet, improving accessibility to active transportation travel modes, and staff-focused opportunities to reduce vehicle miles traveled
- Strategies for reducing waste could include organics composting for city operations, modifying procurement policies to include a preference for reusables vs disposables (ex: ceramic coffee mugs vs paper cups) and the associated infrastructure such as a dishwasher, procedures for hosting events such as local and low-waste catering firms, and developing no or zero waste event guidelines for staff and volunteers
- If forestry or land use practices are selected, strategies could include identifying opportunities to enhance urban forestry and looking at expanding green spaces and recreational areas to enhance the City's ability to adapt to a changing climate, increase carbon sequestration, and protect the City infrastructure and other assets

We will discuss **Resiliency Strategies** with Stakeholders:



- Strategies to enhance resiliency may include investing in microgrids such as a combination of solar and battery storage, exploring green infrastructure alternatives to traditional stormwater that mimic natural systems
- Identify opportunities to enhance resilience of energy infrastructure and propose strategies to mitigate these risks
- Suggest scenarios for transportation infrastructure to ensure continued functionality
- Evaluate solutions for resilience of emergency services and propose strategies to enhance preparedness of fire, police, and health services during extreme weather events

WSB will review **Adaption Opportunities** with Stakeholders:



- Outline the City's most pressing vulnerabilities and identifies priority areas for action, ensuring the City is equipped to respond to climate-related events such as floods, storms, or extreme heat. These findings will directly inform resilience strategies with the input of stakeholders
- Recommend solutions to address risks to water infrastructure and identify adaptation measures for water supply and stormwater systems
- Discuss potential changes needed to city services and related equipment needed to adapt to a changing climate. Adaptation strategies could include:
 - Planting diverse species of trees that are identified to be amenable to our changing climate
 - Upgrade drainage infrastructure to handle increased rainfall intensity, reduce flood risk, and manage stormwater more effectively
 - Retrofit existing City-owned buildings to improve energy efficiency
- Scenarios may consider asset management strategy changes in the future
- Prepare for and execute meetings to gain input on CARP development strategies, costs, risks, opportunities and other ideas
 - One (1) meeting with department heads to gather initial feedback
 - Up to two (2) work sessions with the Committee.
 - First session will focus on presenting initial information in early planning stages, gather feedback, sync up and align on goals and strategies, and incorporate into the draft CARP.
 - Second session will be held to present final information, reflect on input from the Council, incorporate feedback into final CARP, and make recommendation to Council to approve the Plan.
 - Up to two (2) City Council meetings to:
 - Check-in at the midpoint of the project sync-up and align on vision, goals and strategies
 - Vote to approve the Plan recommended by the Committee

WSB will **revise planning document based on feedback** received at all meetings with Committee, City Council, staff and other stakeholder input.





TASK 4:

Implementation Plan and Final Report

WSB will **compile and finalize a master report**, the CARP, encompassing the research, analysis, strategy development findings and recommendations in Tasks 2 and 3.

The CARP will include results of the vulnerability assessment that outline the City's most pressing vulnerabilities and identifies priority areas for action, ensuring the City is equipped to respond to climate-related events such as floods, storms, or extreme heat.

The CARP will include actionable insights from the vulnerability assessment and the GHG inventory that will inform decision-making and future initiatives, supporting long-term resiliency at the City.



The Implementation Plan will be in an easy-to-read, visual chart summarizing:

- Vision (see Task 3)
- Initiatives/strategies (see Task 3)
- Tactics/actions (see Task 3)
- Timeline
 - Near Term (see details on right)
 - Long Term (see details on right))
- Roles and responsibilities
- Metrics and tracking (see details on right)

DETAILS:

Near term actions may include:

- Top 3-5 priorities for Year 1
- Advisory team to guide efforts
- Education, awareness and training opportunities for staff
- Funding opportunities

Long term actions may include:

- Sources of funding that the City would be competitive for based on anticipated scoring criteria
- Multi-year budget planning milestones
- Staff resources and capacity building needs such as workforce development, support by contractors, and industry partnerships
- Developing policies, procedures, or protocols
- Catalyzing partnership development with other jurisdictions and services providers

Metrics and associated tracking plans:

- Measures of success
- Sources of data for key metrics
- Cadence and process for reporting



TASK 5:

Compile Final Report to MPCA and Support City Staff in Submitting to the MPCA

WSB will compile the final report and support the City Staff in submitting it to the MPCA based on the agreed up on timeline of submitting by May 30, with final MPCA contract deadline of June 30.

Anticipated Schedule



TASK	2025					
	JAN	FEB	MAR	APR	MAY	JUN
Project kickoff. Meet with requested stakeholders to align on mission, vision, and key focus areas						
Review City existing conditions, scan best practices of similar communities						
Compile greenhouse gas inventory of City operations and conduct vulnerability assessment						
Meet with department heads and key staff to gather input on gaps, barriers, opportunities, and risks that can feed into strategy options to be discussed at Committee work sessions						
Host Committee work session to align on vision, high level goals, review initial greenhouse gas data, key priorities/categories for the CARP, and set priorities for strategy development						
Provide briefing to Council on workplan and status of project and seek high level feedback (this could also be in a workshop/work session setting)						
Develop City operations strategy and implementation plan						
Finalize City operations strategy and implementation plan						
Committee work session to incorporate Council input from March meeting and make recommendation of final CARP to Council						
Present CARP in early May to Council based on Committee recommendation for approval						
Submit final CARP (1 month prior to June 30 MPA deadline)						
MPCA deadline for submission						

Deliverables



We envision the deliverables being structured in the following format:

■ CLIMATE ADAPTATION AND RESILIENCE PLAN (CARP)

- Existing Conditions Report
- Climate Vulnerability Assessment
- Greenhouse Gas Inventory

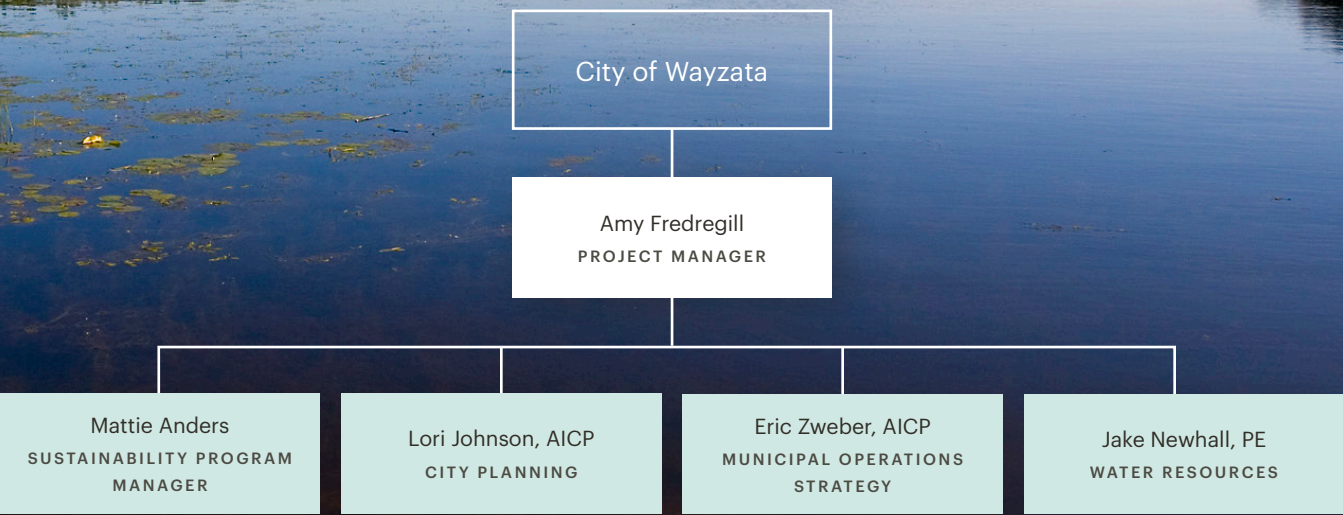
■ CITY OPERATIONS IMPLEMENTATION PLAN AS CARP APPENDIX

- Strategies
- Tactics
- Timeline
- Funding
- Roles
- Metrics

■ FINAL GRANT REPORT

- Submission of Final Grant Report to MPCA by May 30, ultimately due by June 30

WSB Team





Amy Fredregill

PROJECT MANAGER

Having worked in the public, private and non-profit sectors in the Midwest and nationally, Amy is able to strategically meet the resiliency needs of communities, businesses and other stakeholders. By focusing on the business case for sustainability, her nearly 25 years of experience provides depth to advance solutions on complex energy, water, waste and other sustainability challenges. This background serves as the foundation to help clients explore energy solutions such as wind and solar, energy optimization, microgrids for resiliency, and electrification of fleets and public transit. Previously, Amy served as the Managing Director of the Sustainable Growth Coalition at Environmental Initiative (EI). The Coalition primarily represents large public sector institutions as well as global companies headquartered in the Upper Midwest that are leaders in corporate sustainability. Prior to EI, Amy was Xcel Energy's Manager of Resource Planning and Strategy for External and State Affairs at NSP-MN and the Executive Director of the Midwest Renewable Energy Tracking System. Amy is currently working to analyze sustainability related uses of a proposed city franchise fee.



Mattie Anders

SUSTAINABILITY PROGRAM MANAGER

Mattie is the Sustainability Program Manager for WSB. She has seven years of experience in environmental consulting and a master's degree in science, technology, and environmental policy from the Humphrey School of Public Affairs at the U of MN. Her experience builds on social, economic, and environmental analysis to plan and execute relevant, meaningful change at both local and state levels. This has provided Mattie with the skills to solve complex problems through both mitigation and adaptation methods that address and build sustainable practices, with capacity building at the heart of her work.



Lori Johnson, AICP

CITY PLANNING

Lori has more than 27 years of experience working in a municipal planning department, having worked her way up through the planning department at the City of Blaine, to become their city planner. As the city planner, she supervised two planners and managed day to day functions of the planning department as well as the application processes for the Planning Commission and City Council. She is well versed in all aspects of city planning activities including project management, site planning application review, public participation and long range planning. Lori has extensive experience with residential, commercial and industrial plan review, approval and implementation. Lori is skilled in navigating the approval process for clients and communities, as well as effectively communicating with city councils, planning commissions, developers, real estate professionals, and residents.



Eric Zweber, ACIP

MUNICIPAL OPERATIONS STRATEGY

Eric is a senior project manager with 23 years of community planning experience and six years of project management experience working on a variety of renewable energy and sustainability projects. Eric has provided planning services for numerous communities including serving as interim Community Development Director for Wayzata in 2015, 2019 and 2020; for Arden Hills in 2016 and 2017; and for Maple Grove in 2018. Eric has also worked cooperatively with number renewable energies developers to develop both solar and wind resources and is a past board member of the Minnesota Solar Energy Industrial Association (MnSEIA). He has a passion for sustainable and resilient practices to address the needs of communities and larger public.



Jake Newhall, PE, PMP

DIRECTOR OF WATER RESOURCES

Jake has more than 18 years of engineering experience and has managed and designed many types of water resources projects, including modeling, planning, design, maintenance programs, and construction. He has worked with numerous watershed municipalities, counties and state agencies. Jake's well-rounded water resources skills and experience allow him to collaborate and be innovative while solving challenging water quality and water quantity problems.

References and Project Examples



St. Anthony Village Climate Plan

CLIENT: ST. ANTHONY VILLAGE

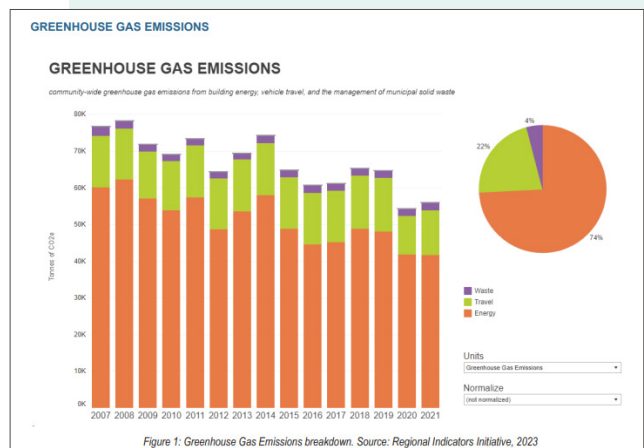
LOCATION: ST. ANTHONY VILLAGE, MN

DURATION: MAR 2023 - DEC 2023

WSB developed a Climate Plan adopted by the City Council in Dec 2023 of St. Anthony Village. The Plan includes high level goals, specific initiatives to reduce city-wide greenhouse gas emissions, address resident climate concerns, and improve community resilience. The Plan categories include energy, water, transportation and waste. Prior to plan development, WSB analyzed city-wide emission trends and solicited feedback from residents on local climate action priorities. Informed by this data, experts across WSB's service areas identified actions for both city staff and residents to pursue to create positive change in their community. WSB carried the plan through the Parks and Environmental Commission review and City Council adoption processes. WSB continues to support city staff with plan implementation and seeking funding to advance plan goals.

KEY WSB STAFF: AMY FREDREGILL, HANNAH DELKER, JUSTIN MESSNER

REFERENCE: CHARLIE YUNKER | CITY ADMINISTRATOR | 612.782.3315 | CHARLIE.YUNKER@SAVMN.COM



Electric Vehicle Charging Deployment

CLIENT: CITY OF EXCELSIOR

LOCATION: EXCELSIOR, MN

DURATION: 2024

Our sustainability team collaborated with the City of Excelsior to install a network of electric vehicle (EV) charging stations downtown, supporting their clean transportation and climate goals. WSB began with site selection, identifying high-traffic areas to maximize accessibility and use. Our team then conducted site evaluations based on electrical infrastructure and scalability before researching vendors to ensure reliable, cost-effective, and future-proof chargers, aligning recommendations with the City's community needs and sustainability goals.

WSB partnered with utility providers to evaluate electric load capacity so as to not overburden the grid, and upgraded infrastructure where needed. WSB will oversee the installation of all chargers, ensuring regulatory compliance and usability.

KEY WSB STAFF: AMY FREDREGILL, MATTIE ANDERS,
MORGAN DAWLEY

REFERENCE: KRISTI LUGER | CITY MANAGER | 952.653.3672
| KLUGER@EXCELSIORMN.ORG



Minneapolis Regional Chamber of Commerce Climate Plan

CLIENT: MINNEAPOLIS REGIONAL CHAMBER OF COMMERCE

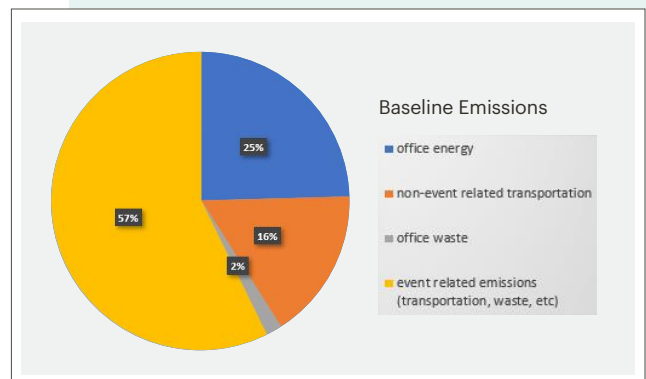
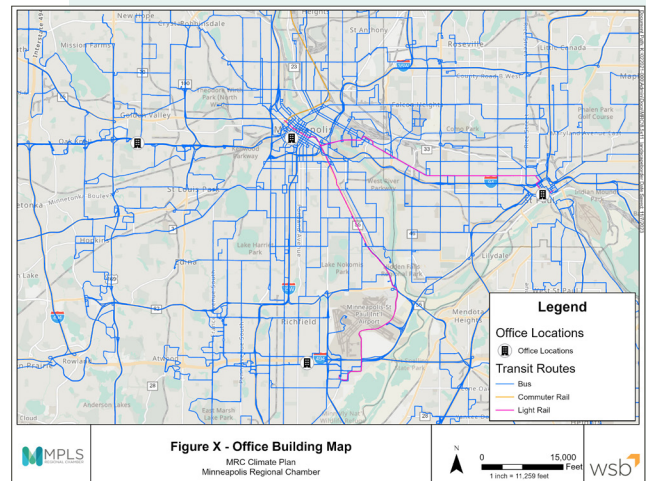
LOCATION: MINNEAPOLIS, MN

DURATION: 2023 - 2024

WSB partnered with the Minneapolis Regional Chamber of Commerce (the Chamber) to develop a comprehensive climate action plan aimed at reducing its operational carbon footprint. The project began with an in-depth greenhouse gas (GHG) inventory, assessing the Chamber's direct and indirect emissions across multiple operational sectors, including energy consumption, transportation, solid waste management, water use, and wastewater treatment. Our team worked closely with stakeholders through extensive engagement to gather data, understand operational activities, and align mitigation strategies with the Chamber's goals. The plan not only outlined actionable mitigation strategies but also incorporated a clear implementation timeline, ensuring the Chamber could achieve measurable progress toward sustainability. The outcome is a robust, data-driven climate strategy, tailored to the Chamber's specific operations and designed to drive long-term environmental impact.

KEY WSB STAFF: AMY FREDREGILL, MATTIE ANDERS, LILLIAN PRYBILL

REFERENCE: CHRISTINE LEVENS | CHIEF OF STAFF | 612.370.9116 | CLEVENS@MPLSCHAMBER.COM



Macy's Site Environmental Assessment Worksheet

CLIENT: CITY OF EDINA

LOCATION: EDINA, MN

DURATION: 2024

WSB completed an environmental assessment worksheet (EAW) for the former Macy's site to evaluate environmental effects on a new development, providing a systematic review of potential environmental impacts with sustainability and risk at the forefront of the evaluation.

This vulnerability assessment identifies environmental sensitivities, potential hazards, and areas where mitigation may be required. Factors regarding the site conditions and surrounding environment were examined to assess the project's vulnerability to natural hazards such as flooding, erosion, extreme precipitation, extreme heat, and other stressors from climate change. Tools such as NOAA's Climate at a Glance mapping tool, EPA's CREATE Storm map, First Street Foundation's Flood Risk Factor tool, MetCouncil's Climate Vulnerability Screening Tool, and MetCouncil's Extreme Heat mapping tool were used to evaluate site specific vulnerabilities and how climate change may impact the vicinity of the project in coming years.

WSB continues to work with municipalities to identify risks to projects, and provide comprehensive assessments at both the site and city-level.

KEY WSB STAFF: AMY FREDREGILL, MATTIE ANDERS,
LILLIAN PRYBILL

REFERENCE: CARY TEAGUE | COMMUNITY DEVELOPMENT
DIRECTOR | 952.826.0460 | CTEAGUE@EDINAMN.GOV



Fees



WSB will provide the services described above for \$48,500.
A breakdown of the budget by task is described below.

TASK DESCRIPTION	COST
TASK 1: COORDINATION AND PROJECT MANAGEMENT	\$7,500
TASK 2: EXISTING CONDITIONS REPORT	\$15,800
TASK 2A: CONDUCT SCAN	\$2,000
TASK 2B: VULNERABILITY ASSESSMENT	\$3,000
DATA GATHERING	\$1,600
VULNERABILITY EVALUATION	\$2,400
TASK 2C: GHG INVENTORY	\$6,800
TASK 3: OPERATIONS STRATEGY DEVELOPMENT	\$10,200
MEET WITH CITY STAFF (1)	\$1,350
COMMITTEE WORK SESSIONS (2)	\$1,700
CITY COUNCIL MEETINGS (2)	\$1,200
STRATEGY DEVELOPMENT	\$5,950
TASK 4: RESILIENCE AND IMPLEMENTATION PLAN	\$15,000
IMPLEMENTATION PLANNING	\$6,500
CARP FINALIZATION	\$8,500
TOTAL PROJECT COST	\$48,500

All expenses such as travel costs incurred shall be reimbursed in accordance with our customary reimbursable expenses.

Acceptance



This letter represents our understanding of the proposed scope of services. If this proposal is found acceptable, we can prepare a contract or Professional Services Agreement for the work described here. If you have any questions about this proposal, please feel free to call me at 612.965.1489 or email afredregill@wsbeng.com. This fee proposal is valid for 90 days from the creation date. WSB may reissue a revised proposal upon request if the indicated period has lapsed.

We appreciate the opportunity of being considered for this project and we look forward to working with you.

Sincerely,

WSB

Amy Fredregill

WSB Senior Director of Sustainability

Forge ahead.



WSBENG.COM

Proposed Electrical Equipment Purchases

QTY	ITEM	SKU	RETAIL	REPLACES	LINK
1	Dewalt 2x20V RWD Self-Propelled Mower (Kit)	DCMWSP255Y2	\$775.44	Gas-powered push mower	Home Depot
1	Dewalt 60V MAX 15in Brushless Cordless String Trimmer (Kit)	DCST970X1S	\$299.00	2 cycle string trimmer	Home Depot
1	EGO Power+ Nexus Power Station 120V 3000W Power Inverter	PST3042	\$899.00	Gas generator	Ace Hardware
1	2-pack Dewalt FlexVolt 20V/60V MAX 9Ah Battery	DCB609	\$339.00		Home Depot