Sustainability Committee Meeting

Thursday, September 28, 2023

City Hall Council Chambers – 601 Main St W. Ashland, WI 54806

6:00 PM

Take notice that a meeting of the Sustainability Committee will be held in- person in the City Hall Council Chambers, with the availability to attend virtually.

To join the meeting from your computer, tablet or smartphone: https://meet.goto.com/740241965. Or dial in using your phone. United States (Toll Free): 1 866 899 4679 Access Code: 740-241-965

The following items will be considered:

1. **Approval of Agenda**

2. **Approval of Minutes**

   a. Approval of minutes from the June 27th, 2023 meeting

3. **Citizen Participation Period**

4. **Projects/Discussions**

   a. a) Lawn Care Product Use and Toxicity - Bob Laskowski (Discussion)
   b. b) Waste and Recycling
   c. c) Climate Change
      i. i. 25 x 25 Plan further discussion
      ii. ii City Vehicle Fleet discussion
   d. d) Water
      i. i. Develop Sourcewater Protection Plan Initial Recommendations
   e. e) Annual Report for City Council
   f. f) Solar Incentives Proposal
   g. g) Complete Streets - Discussion
   h. h) Green Tier Legacy Communities - Update/Discussion
   i. Great Lakes Friendly Restaurant Certification - Discussion
   j. Seed Mix - Discussion
   k. Community Garden Update

5. **Items of Interest for Future Meetings**

6. **Adjournment**

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NOTE: Upon reasonable notice, the City of Ashland will accommodate the needs of disabled individuals or individuals with limited English proficiency through auxiliary aids or services. For additional information or to request this service, contact the Planning & Zoning Department at 715-682-7041 (not a TDD telephone number)

City of Ashland – Sustainability Committee Meeting

Thursday, July 27th, 2023

6:00 pm – 7:00 pm HYBRID MEETING:

Meeting Link: https://meet.goto.com/740241965 | Access Code: 740-241-965 - CITY COUNCIL CHAMBERS (601 Main Street W)

Energy Action Plan, 25x25 Plan, Sourcewater Protection Plan linked here: https://sites.google.com/view/ashland-sustainability/themes

Present: Laura Graf, Dale Kupczyk, Axel Peterman, Kate Ullman, Steven Wiley

Agenda

1) Approval of Agenda
   Peterman called the meeting to order at 6:07 pm. Kupczyk moved and Graf seconded to approve the agenda. Motion carried.
2) Approval of minutes from the June 22, 2023 meeting
   Graf moved to approve the minutes and Peterman seconded. Motion carried.
3) Citizen Comments – Bob Laskowski on Junction Road had a bad incident two weeks ago Sunday. His dog died. He has had problems. His neighbors have been spraying their lawn with Green Oasis. A couple years ago his buddy was getting sick. He had blood tests done and there were toxins in the system. It came back as Green Oasis based out of Eau Claire. The vet said that this stuff is toxic. This year he got sick again and a couple weeks ago he showed signs. Sunday he was chipper and real restless. Later he started vomiting and diarrhea and Mr. Laskowski suspected his dog had toxins in his system. His dog died six hours later. He talked to the neighbor who said they were biocides. He would like this committee to look deeper into what these chemicals are. He talked to Kevin Seefeldt who has not yet found anything out. He does not see any birds around and we are a Bird City. He was on the Parks Committee for a long time. He does not spray anything on his lawn. He is putting his plea into this Committee so asking us to check it out.

   Peterman asked what the biocide is. Mr. Laskowski replied he did not know but the vet said the chemical is strong. He thanked the committee.

4) Projects/Discussions
   a) Waste and Recycling
      Peterman asked for an update. Wiley explained about Cleansweeps and that it seemed to have gone well. Graf stated that she was there and someone came with a U-Haul with a whole thing of paint which was great. The event went really well. Peterman wished he could have come this year. Kupczyk mentioned there are no recycling bins at Bayview Beach and oftentimes people come with things from Culvers and Dairy Queen, etc. All this goes into the garbage. Ullman mentioned that Sara Hudson was going to work on a pilot project to have recycling in some of the parks so suggested Wiley check with her on that. Wiley said that he would.
   b) Climate Change
      i. 25x25 Plan further discussion

Peterman asked for an update. Wiley explained about looking at the City facilities and that Marisa Bayer from the Partners in Energy group sent Wiley the energy dashboard recently. Wiley provided an update on the solar project the committee started discussing last month with Bill Bailey. Ullman asked Wiley to send her an email. She will send Wiley the information on utility bills. Wiley explained that he had conversations with John Butler and Brian Ledin about the Wastewater Treatment Plant (WWTP) along with Brant Kucera. They are open to exploring solar at the WWTP but Mr. Kucera would like to have more information prior to taking the proposal to Council. Graf said that we could break in the staff slowly to let them get their arms around it. A data logger would be a great first step. Graf liked Kelly Westlund's idea of having a team go through the bills. She also suggested that Wiley talk to Mayor about appointing Kelly Westlund to the committee.

c) Water
   i. Develop Sourcewater Protection Plan initial Recommendations
   Peterman stated that Radke was going to contact someone from the Berg Center and he has not heard any update on that. Wiley had not either. Ullman explained that the Berg Center folks were busy this time of year. Peterman said that at this time of year he supposed there was not anyone else we could contact. Ullman asked what our ask was of the Berg Center. Peterman explained that we decided we were not knowledgeable enough on sourcewater protection to develop recommendations. Ullman stated that the plan had recommendations in it and the Berg Center was involved in developing these. As a start we could look at these recommendations and find out which ones were the City's responsibility. We could then flesh out recommendations as needed. Peterman agreed. Peterman asked if anyone would be willing to take a look at the recommendations and pick out ones we are willing to do something about. Ullman said she can't volunteer for August but can for September. Ullman asked if we can we put this on the September agenda. Wiley stated that this could go on the agenda for September.

d) Annual Report for City Council
   Peterman asked for an update. Wiley explained that he has been working on an InDesign layout. Peterman had sent Wiley email chains that were pertinent.

e) Solar Incentives Proposal
   This item was discussed under the 25x25 Plan discussion above.

f) Complete Streets
   i. Discussion
   Ullman left the meeting at 6:33 pm. Wiley explained Complete Streets and that it was an approach where designers consider all road users when creating street designs rather than prioritizing automobiles by default. Mr. Laskowski left at 6:35. Graf thinks Ashland is doing a good job overall. Wiley explained that communities can adopt a resolution or ordinance to adopt a Complete Streets approach and this was a way to formalize Complete Streets here.

g) Green Tier Legacy Communities
   i. Update and Annual Report Discussion

Ullman rejoined at 6:38 and left due to technical issues at 6:39 pm. Wiley provided an update and explained that the material the committee was compiling for the annual report for Council would address this.

h) Great Lakes Friendly Restaurant Certification
   i. Discussion
      Peterman mentioned that Amman was not present. Peterman and Wiley explained that this is about helping restaurants become greener through a voluntary process. Some actions included changing practices and containers from their current ones. Graf provided an explanation for Kupczyk. Amman is leading the charge.

i) Seed Mix
   i. Discussion
      Graf has not heard anything back on this item.

j) Community Garden Update

Peterman got everything done that he wanted to. They have 34 lots instead of the previous 22. They filled every lot except one. The person that was going to fill the one lot flaked. They will fill it next year. They are overhauling the compost system. The one they had previously was not effective. This spring they had a 4-foot-high pile of compost six foot square and this was several years' worth of compost. The objective is to get everything out of compost area so they could turn it into a three-bin system. Graf asked what was most of Peterman's compost. Was it mostly grass? Peterman explained that it was weeds, etc. He had been talking with Sara Hudson about accepting food scraps. They are not at that point but they are working on that. Kupczyk asked if this was near the Beaser School. Peterman said yes. Kupczyk asked if the garden property was part of the school property. Peterman said it was separate. They have been drawing water from the school property but the water had been turned off. He had spoken to Ms. Hudson about this and they figured it out. They will continue to work it out. They have had five volunteer work events and now will have a sixth. Events included a kid's pollinator event, upcoming classes such as a garden foraging class, the second potluck of the summer a few weeks ago. There has not been a spot in the community garden for people to sit and hang out so this has been a fascinating change. There was also a public plot. They are hoping to expand the program next year and take over another chunk of Beaser Park also. Hopefully there will be a short piece about them in Agriview in the next month or so. They have a visit from the community garden and urban agricultural specialist from UW Extension soon. He does most of his work around Milwaukee and was up last year. The group was thinking about what they want to do next year. They want to think about fencing and plan to install permanent fencing next spring. They are thinking about chain link deer fencing since there were issues with deer this year. If anyone has a rolling measuring thing Peterman would like to use it for the day. The committee discussed that Public Works or Water Utility should have one. The group plans to have an orchard and more allotment plots. They ones they have are large at 200 sq. ft. per piece and intimidating. They are talking about 2'x2' plots. Peterman has been in touch with Northlakes Community Clinic who had someone there a month ago and they may sponsor a paid garden manager position. They may also

sponsor a program to help people start community garden program for people wanting to start gardens in their neighborhoods.

Kupczyk asked if Mr. Laskowski let his dog run loose. It was difficult if that is the case. He wished police would monitor this with trails too. It was important to keep dogs on a leash and clean up. The amount of dogs that are loose is a problem. If you say something to some people they holler at you. If your animal goes on someone else's property and gets sick that is your issue. Graf does not know if the City can pass an ordinance. Kupczyk was not sure how much the City can do. Peterman asked if the City has an ordinance requiring people to put signs up when spraying. Wiley explained that he was not sure and it may be a state regulation but we can check. Kupczyk stated that something needs to be done about the trees at Palmetto Beach. They impact the views currently. He stated that he had issues from the City about the view of the lake when Culvers, St. Luke's, and Toyota went in but could not see from City properties.

5) Future agenda items
   Ongoing agenda items would remain on the agenda.
6) Adjournment – Kupczyk moved and Graf seconded. Motion carried and the meeting adjourned at 7:00 pm. Kupczyk stated he will not be at the next meeting.

Respectfully Submitted,

Steven Wiley
Planning and Development Director

PROJECT TITLE: Resilience and Prosperity in Rural Northern Wisconsin

TOPIC AREA: Area 1

REGION OF INTEREST: Midwest

TECHNICAL CONTACT: Amy Simpkins, muGrid Analytics; amy@muGrid.com 720.281.0482

BUSINESS CONTACT: Marie Redmond, State of Wisconsin Office of Sustainability and Clean Energy; maria.redmond@wisconsin.gov

TEAM MEMBER ORGANIZATIONS: State of Wisconsin Office of Sustainability and Clean Energy, State of Wisconsin Office of Rural Prosperity (ORP), Wisconsin Economic Development Corporation (WEDC), muGrid Analytics, Bayfield County and Towns, Villages and Cities in Bayfield County, Wisconsin, Red Cliff Band of Lake Superior Chippewa, Cheq Bay Renewables, Slipstream

PROJECT LOCATION(S): 28 Cities, Villages and Towns in Bayfield County, Wisconsin; Red Cliff Band of Lake Superior Chippewa

RURAL OR REMOTE AREA(S) THAT WILL BE RECEIVING TECHNICAL OR COMMUNITY BENEFITS: **Red Cliff Band of Lake Superior Chippewa Indians** – population 1403, **Towns, Villages and Cities in Bayfield County, Wisconsin (Known collectively herein as "Bayfield County")** including the City of Bayfield – pop. 584, Town of Bayfield – pop. 787, Town of Barksdale – pop. 745, Town of Barnes – pop. 823, Town of Bayview – pop. 512, Town of Bell – pop. 355, Town of Cable – pop. 177, Town of Clover – pop. 261, Town of Delta – pop. 315, Town of Drummond – pop. 544, Town of Eileen – pop. 722, Town of Grand View – pop. 508, Town of Hughes – pop. 471, City of Iron River- pop. 768, Town of Kelly – pop 436, Town of Keystone – pop. 373, Town of Lincoln – pop. 251, Town of Mason – pop. 289, Village of Mason – pop. 101, Town of Namakagon – pop. 316, Town of Orienta – pop. 164, Town of Oulu – pop. 560, Town of Pilsen – pop. 216, Town of Port Wing – population 156, Town of Russel – pop. 1553, Town of Tripp – pop. 244, Town of Washburn – pop. 554, City of Washburn – pop. 2051. The population density of this area is 11 people per square mile.[1]

CONFIDENTIALITY STATEMENT: None

COST SHARE WAIVER STATEMENT: As a tribal government, the Red Cliff Band qualifies for the 20% special cost share. Bayfield County and the Towns in Bayfield County also qualify for the 20% special cost share as local units of government. The State of Wisconsin also qualifies for the 20% cost share as a state government. Upon approval, the tribal and government entities listed will equitably share and commit to the cost share needed.

[1] U.S. Census Bureau QuickFacts: Bayfield County, Wisconsin

MISSION & OBJECTIVES

This Resilience and Prosperity in Rural Northern Wisconsin Project will deliver clear and measurable benefits to remote and rural communities in far northern Wisconsin and create a framework to replicate benefits supporting energy access and resilience for other rural communities across the state. Wisconsin has a substantial rural character, with 26 percent of the state's population residing in rural communities. These rural communities face a unique set of challenges relating to future planning, increasing infrastructure costs on a per capita basis, and a disproportionate energy burden by percentage of income.

As a rural area in northern Wisconsin, located on the shores of Lake Superior, the communities comprising Bayfield County (which includes all the towns, villages, and cities in the county) and the Red Cliff Band of Lake Superior Chippewa's sovereign territory have already demonstrated their commitment to clean, resilient power with small municipal microgrid projects. This innovative proposal seeks to expand the current pilot microgrid projects into community-wide strategic electrification, alternative energy, and resilient power deployments as a replicable model that will be utilized to create a pipeline of similar projects in rural communities across the state. The project will support these communities in the clean energy transition with the following objectives:

- Bolster public and private vehicle electrification with fleet vehicle EV conversion and installation of a charging infrastructure network throughout the community to reduce the energy burden to community members
- Support this EV charging infrastructure plus building electrification through the proliferation of solar-plus-storage microgrids at critical facilities to improve grid performance and resilience
- Increase carbon efficiency of large municipal maintenance vehicles such as plow trucks by converting from diesel fuel to compressed natural gas (CNG) to reduce emissions

This project uses a wide variety of energy technologies, referred to collectively as Distributed Energy Resources (DER.) The Project will utilize solar photovoltaics (PV), battery energy storage systems (BESS), electric vehicle supply equipment (EVSE) and intelligent control systems to integrate all components into microgrids capable of operating with, or independent from, the electric grid. By installing 18 microgrids, equitably dispersed throughout the County and on Tribal lands, this project will demonstrate how a county-wide approach can reduce carbon emissions, increase energy security, and reduce energy burden. In addition, the Project will utilize CNG fueling to demonstrate carbon reduction, energy efficiency improvements, and monetary savings in the county's critical heavy-vehicle plow truck fleet, a sector not yet available for electrification. Conversion to CNG will reduce wheel to wheel CO2 emissions by 25%, and substantially improve air quality with reduced NO X and soot emissions. Costs will be reduced by 75% by reducing diesel consumption, a major portion (24%) of all energy used in County facilities (BTU equivalent) and 36% by dollar.

DEMONSTRATION PLAN

Rural Wisconsin is disproportionately at risk for direct impacts from climate change. These impacts result in decreased agricultural production, instability for rural jobs and small businesses, and loss of revenue from outdoor recreation. Wisconsin's agriculture and tourism industries, which are concentrated in rural parts of the state, contribute nearly $95 billion dollars to the state's economy and face the greatest risks of climate change impacts. Further, Northern Wisconsin is frequently blanketed with up to six months of snow cover and Bayfield County is the northernmost county in Wisconsin. Average winter temperatures have risen, creating wetter and heavier snows with increased levels of snowpack. The current 2022 season has seen record snows, increased electric outages, stronger and more frequent winds, as well as strained snow removal equipment and human capacity. In addition, the remoteness of this area results in higher electric costs, increased travel times, reduced availability of equipment and services, and reduced capacity to compensate for these shortcomings.

This Project will increase resilience in critical services throughout the participating communities. Five highway garages will have resilient microgrids and EV charging to support fleet vehicles. Community Resilience Hubs will be established in six towns dispersed throughout the County providing heat, shelter, and charging of electronics. Red Cliff will have two microgrids established in essential tribal facilities - their Health Clinic and new Transportation Building. The transportation sector will advance the transition to electrification via public charging infrastructure, and the essential County plow fleet will reduce emissions and costs with CNG.

Preliminary Development Plan and Timeline:

The development plan includes five components which run concurrently:

1) Bayfield County Microgrid Implementation and CNG Plow Trucks
    a. Bayfield County 5 Highway Garage Microgrids (Solar, BESS, EVSE)
    b. Bayfield County CNG Fueling Station and 2 Plow Trucks
2) Bayfield Towns Microgrid Implementation
    a. Bayfield Towns - 5 Town Halls & Garages Microgrids (Solar, BESS, EVSE)
    b. Town of Port Wing - 5 Sites including WWTP (110kW Solar, BESS, EVSE)
3) Red Cliff Band Microgrid Implementation
    a. Red Cliff Health Clinic Microgrid, 300kW Solar, BESS, EVSE
    b. Red Cliff Transportation Building, (Solar, BESS, EVSE)
4) Workforce Development – see Investing in the American Workforce section
5) Community Engagement – see Community Benefits Plan section

Timeline

Phase 1: Detailed Project Planning; Q4 2023 – Q2 2024

Phase 1 will launch the project planning phase for all microgrid implementation projects. Many of the proposed implementation projects already have feasibility studies in place, and these will form the basis of the initial design and requirements. For projects that do not have a previously existing feasibility study, one will be conducted to develop preliminary designs and project architectures. Detailed design and interface requirements will be documented during this phase

to prepare for a smooth final engineering process in Phase 2. All microgrids will reach their 30% design milestone by June 2024. Relationships with local utilities and their interconnection procedures will be established. A planning study will be conducted for the CNG fueling and conversion project to finalize siting and design requirements.

The team will work with the communities to develop an operations plan to guide construction, ongoing maintenance, and upgrades. Planning for training will be included, prioritizing a local workforce. Organizers will develop microgrid operation and maintenance training and guidelines, as well as make a plan for renewable energy and microgrid certification, as well as trade training for local community members. Job requisitions for the Energy Specialist positions will be posted for both Bayfield County and Red Cliff governments and interviews will be conducted with the intention of identifying and onboarding in the beginning of Phase 2. The Project will begin detailing and executing the community benefits plan as outlined below.

Phase 2: Project Development, Permitting, and Financing; Q1 2024 – Q3 2024
Final engineering for all microgrid implementations, as well as for the CNG refueling station, will be completed by the winter of 2023-2024. The interconnection applications will be filed as soon as possible during final engineering. A request for proposal (RFP) for the construction will be posted in spring 2024. Contractor selection and contracts will be signed in the summer of 2024. RFPs may be combined for each community or split out by project. Long lead equipment items (including CNG plow trucks and fueling) will be identified in final engineering and ordered as soon as the contractors are in place.

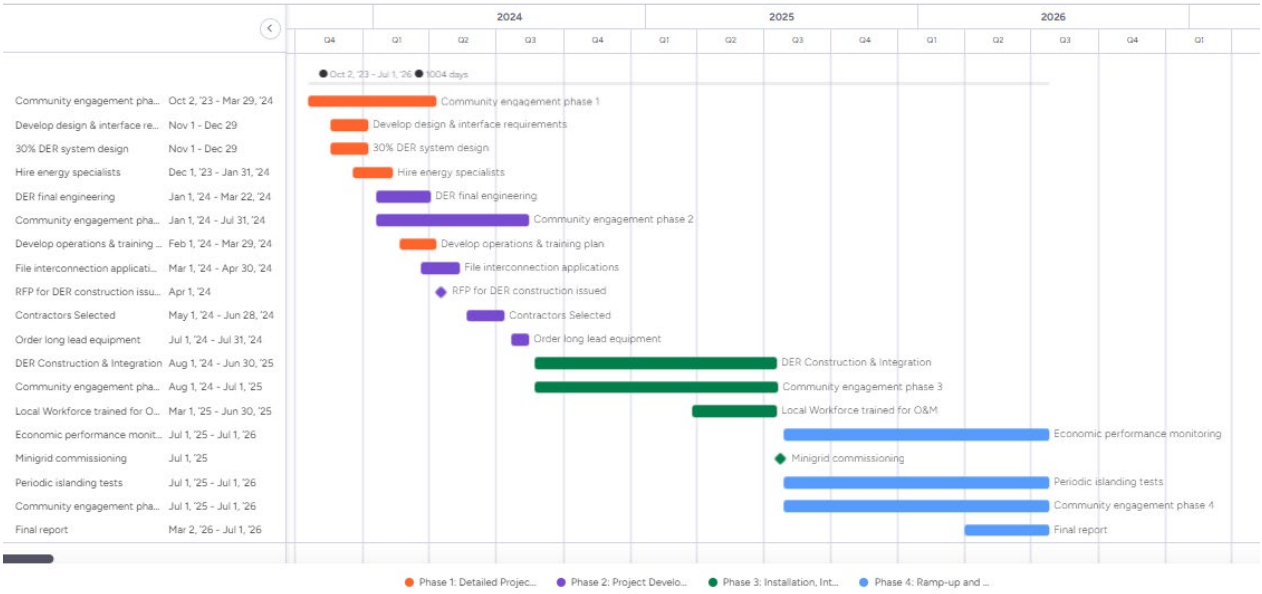
Interested community members will be enrolled in any training programs necessary as designs are finalized and contractors engaged. Community engagement activities will continue as outlined in the Community Benefits Plan section below.

Phase 3: Installation, Integration, and Construction; Q3 2024 – Q3 2025
Construction of the microgrid systems and CNG refueling station will be conducted after final contractors are selected and final engineering completed. The microgrids will be commissioned in summer 2025. Previously identified community members will be engaged during construction and trained for operations and maintenance. Community engagement activities will continue as outlined in the Community Benefits Plan section below.

Phase 4: Ramp-up and Sustained Operations; Q3 2025 – Q3 2026
A trained local workforce will operate and maintain the DER systems, including any periodic testing of islanding capability. The systems will be monitored along with market conditions and utility bills paid to verify economic savings to the communities. These data will be reported monthly throughout the first year of operation to ensure project success.

A report will be generated detailing key design, engagement, and operational processes to enable other communities to replicate this process, along with lessons learned that will be helpful in future projects.

A comprehensive timeline is shown below:



Risks

Supply chain disruptions remain an ongoing concern as some electrical distribution system components need to be scheduled as far as 52-weeks out. This could create a disruption to the planned timing. Additionally, inflation could increase the price points for project estimations. This project team already navigates successfully through similar risks on distributed energy projects and can implement lessons learned for future projects.

DOE Funding Impact

This DOE funding is paramount to project success. Multiple nearby communities will be united by the unique opportunity to work together throughout this project, creating a regional approach to EV charging, electrification, and resilient power support to rural communities.

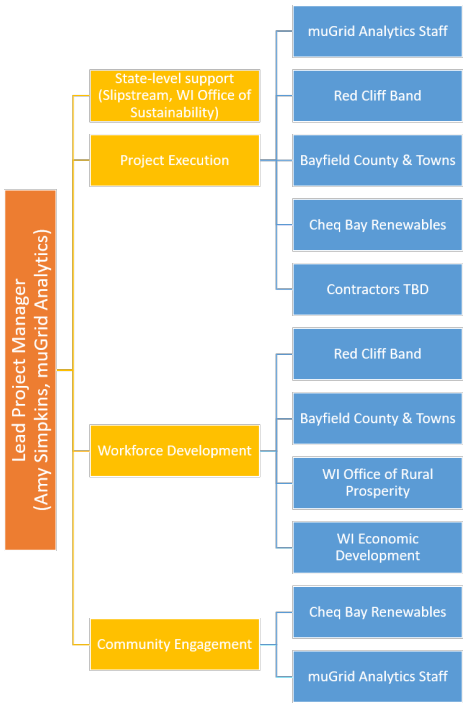
Sustainability Plan

All of the DER projects proposed herein will be analyzed for economic benefits to the communities. Based on the preliminary results provided in existing feasibility studies, these projects will be able to sustain themselves during the operations and maintenance phase based on their economic savings projections, provided that the capital cost for the project is bolstered by the DOE funding.

Additionally, the team will perform data analysis to identify rural and remote communities across Wisconsin with significant energy resiliency challenges and energy burden concerns. Using the findings of the process evaluation and this data review, Slipstream will work with ORP on how to develop a pipeline of microgrids across the state and provide support to future installations. This will include a guide on microgrid installation best practices and considerations for areas to prioritize across the state and in individual counties.

MANAGEMENT AND ORGANIZATION

Bayfield County and the Red Cliff Tribe have been working successfully with Cheq Bay Renewables and muGrid Analytics on various renewable energy projects in Wisconsin since 2018.



Team Principals

Lead Project Manager (LPM): Amy Simpkins, CEO, muGrid Analytics

muGrid Analytics, a woman-owned small business, has the technical expertise and analytical software to design and implement optimized solar plus storage systems and controls. They have been supporting DER projects in Wisconsin for over five years, including the largest BESS installation (1MWh) in Wisconsin to date.

Business Lead: Maria Redmond, Director, Office of Sustainability and Clean Energy

The OSCE staff members assigned to this program have historically served as the lead in over $85 million federally awarded energy programs. The OSCE will work collaboratively with the partner organizations to collect data, monitor progress, manage the reporting, serve as a central point for financial management and analyze any data generated through the process.

Demonstration Site Project Manager: Mark Abeles-Allison, Bayfield County Administrator

Bayfield County is an experienced leader in the clean energy transition. Bayfield was the first county in Wisconsin to receive a commendation from Governor Evers in February 2020 for achieving 100% carbon-free electricity in all county-owned facilities.

Demonstration Site Project Manager: Morgan Gerk, Red Cliff Band of Lake Superior Chippewa

Red Cliff has been studying the feasibility of clean energy projects since 2018.

Project Manager/Community Support: William Bailey, President, Cheq Bay Renewables (CBR)

Bill Bailey has experience in solar development, financial analysis, team organization and management. His involvement as a volunteer continually demonstrates his commitment to the community and the environment.

Technical Principal: Travis Simpkins, PhD., CTO and Founder, muGrid Analytics (muGA)

Dr. Travis Simpkins holds multiple diverse degrees in financial, electrical, and computer engineering, ideally suited to the demands of performing techno-economic analysis of the demonstration sites included in this proposal.

State-Level Community Support: Beth Haskovec, Director, Office of Rural Prosperity (ORP), WI

The Office of Rural Prosperity at the Wisconsin Economic Development Corporation (WEDC) will lead community outreach efforts utilizing the Bayfield County project as a demonstration project to create a pipeline of similar projects across rural Wisconsin.

Technical Community Support: Maddie Koolbeck, Senior Researcher, Slipstream

Slipstream is a 501(c)(3) nonprofit dedicated to accelerating climate solutions. Slipstream has deep experience with process evaluation, data analysis, and microgrid design.

COMMUNITY BENEFITS PLAN

Supporting Meaningful Community Engagement

The project team will employ various methods to engage the local communities throughout the course of the project. These methods will seek input, perform outreach, provide information, address input and concerns, and engage the community. These methods may include:

- Supporting Rural Communities with Statewide Effort: Connect small communities to state-level resources, align small projects with statewide objectives, and build capacity of rural communities across the state of Wisconsin to implement clean energy projects.
- Public Meetings and Presentations: Hold a series of public meetings and presentations to introduce the renewable energy project to the local community, such as informational presentations and Q&A sessions, where community members can provide feedback.
- Community Surveys: Conduct online and in-person surveys to gather community feedback on the project, gauge community sentiment, gather information about community needs and priorities, and assess the potential impacts of the project.
- Site Visits and Tours: Offer opportunities for community members to visit the project sites and learn more about the technology and construction process. This can include guided tours, information kiosks, and other forms of interactive engagement.
- Educational Programs: Develop educational programs and materials to help the community better understand the technology behind the renewable energy project. This can include school presentations, science fairs, and workshops for students and educators.
- Public Relations: Utilize traditional and social media channels to communicate project updates and engage with the community. This can include email updates, newsletters, social media posts, and other forms of digital or local media outreach.
- Community Advisory Boards: Establish community advisory boards or committees if they do not yet exist to provide ongoing input and guidance on the project. If an energy advisory board or committee exists, engage this group to leverage and complement their current community building efforts. This can help ensure that the project is aligned with the needs and priorities of the local community.
- Continuous Feedback: Throughout the project, provide ongoing opportunities for community feedback and engagement via a dedicated email address, contact form, a physical dropbox sited near the project or other accessible method to identify and address concerns in real-time and ensure that the project is meeting the needs of the community. The project team will ensure community members have access to a variety of formats to provide feedback.

Investing in the American Workforce

Building multiple DER projects across several communities will offer many good-paying construction jobs as well as permanent facility jobs. This transition to clean, distributed energy includes engaging the current energy workforce and ensuring that their skills transfer when transitioning from fossil fuels to renewable energy jobs.

The Red Cliff Tribe faces staffing recruitment and retention challenges due to its remote location and has struggled to maintain adequate personnel for essential services. The proposed project will help the Tribe achieve capacity in this area, and will provide recommendations for small-scale

microgrid installations that will increase grid resilience and reduce the impacts of power disruptions. Collectively, these objectives will support technical education and workforce development opportunities for tribal members, resulting in good-paying local jobs and steady employment.

This funding will directly provide for two full time clean energy specialist positions, one at Bayfield County and one at Red Cliff. With these leaders in place, the local communities will have regional strategists engaged to build up a skilled workforce. This funding will also provide training opportunities for the local workforce to expand and transition their skills to the clean energy economy. This training will be prioritized for an inclusive workforce, including Red Cliff tribal members and residents of Justice40 tracts in the area.

Advancing diversity, equity, inclusion, and accessibility

Bayfield County and the Red Cliff Reservation are located on the extreme northernmost point of Wisconsin along the windswept shores of Lake Superior. Due to the ongoing effects of climate change and an increased prevalence of lake-enhanced severe weather events, the area experiences frequent energy disruptions from downed power transmission lines caused by Lake Superior's legendary gales and extraordinary ice and snow loads. Because of its isolated geography and relatively limited service base, power restoration to this area following outage events is often challenging for regional utility providers who must focus first on upstream energy distribution infrastructure serving larger population centers. Understanding the efficacy of how renewable energy systems in this area could be achieved would provide a significant buffer against future power disruption to the community by offsetting energy deficits with self-generated power capacity. This also supports the Red Cliff Tribe's goals of increased energy sustainability and progress toward eventual energy sovereignty.

The Bayfield County Highway Department serves all the residents and visitors of the county. During a snowstorm or other severe weather event, the county operations are the first responders, clearing snow, downed trees and debris causing water backups. The highway system is the veins and arteries of the community, allowing for smooth and efficient transportation of people, goods and services. To have a secure and efficient Highway Department is part of Bayfield County’s Comprehensive Plan and is primary to this project.

Contributing to the Justice40 Initiative

According to Climate and Economic Justice Screening Tool, there are two census tracts and the lands of the Federally Recognized Red Cliff Tribe that are identified as disadvantaged in and immediately adjacent to the project area. This Project will directly support those disadvantaged communities through the deployment of the microgrids, improving energy resilience and lowering energy costs. The technologies used in this project will create benefits to air quality in these areas and support jobs and training to improve employment opportunities.

The Elements of a Complete Streets Policy

Effective 2018

Smart Growth America
Improving lives by improving communities

National Complete Streets Coalition

Smart Growth America
Improving lives by improving communities

National Complete Streets Coalition

1152 15th Street NW, Suite 450
Washington, DC 20005
202-207-3355

www.smartgrowthamerica.org/completestreets

Elements of a Complete Streets Policy | Effective 2018

The National Complete Streets Coalition (NCSC) previously identified 10 elements of a comprehensive Complete Streets policy to help communities develop and implement policies and practices that ensure streets are safe for people of all ages and abilities, balance the needs of different modes, and support local land uses, economies, cultures, and natural environments.

The Complete Streets movement has since evolved from when it first began over a decade ago to focus far more on implementation and equity. In response to these changes, in 2017 the Coalition updated and revised the Complete Streets policy framework to require more accountability from jurisdictions and provisions that account for the needs of the most vulnerable users. The 10 revised policy elements are based on decades of collective expertise in transportation planning and design, created in consultation with NCSC's steering committee members and a group of national stakeholders consisting of engineers, planners, researchers, and advocates.

The elements serve as a national model of best practices that can be implemented in nearly all types of Complete Streets policies at all levels of governance. For communities considering a Complete Streets policy, this resource serves as a model; for communities with an existing Complete Streets policy, this resource provides guidance on areas for improvements.

An ideal Complete Streets policy includes the following:

1. **Vision and intent:** Includes an equitable vision for how and why the community wants to complete its streets. Specifies need to create complete, connected, network and specifies at least four modes, two of which must be biking or walking.
2. **Diverse users:** Benefits all users equitably, particularly vulnerable users and the most underinvested and underserved communities.
3. **Commitment in all projects and phases:** Applies to new, retrofit/reconstruction, maintenance, and ongoing projects.
4. **Clear, accountable expectations:** Makes any exceptions specific and sets a clear procedure that requires high-level approval and public notice prior to exceptions being granted.
5. **Jurisdiction:** Requires interagency coordination between government departments and partner agencies on Complete Streets.
6. **Design:** Directs the use of the latest and best design criteria and guidelines and sets a time frame for their implementation.
7. **Land use and context sensitivity:** Considers the surrounding community's current and expected land use and transportation needs.
8. **Performance measures:** Establishes performance standards that are specific, equitable, and available to the public.
9. **Project selection criteria:** Provides specific criteria to encourage funding prioritization for Complete Streets implementation.
10. **Implementation steps:** Includes specific next steps for implementation of the policy.

Table of contents

Vision and intent	3
Diverse users	4
Commitment in all projects and phases	5
Clear accountable, exceptions	6
Jurisdiction	8
Design	9
Land use and context sensitivity	10
Performance measures	12
Project selection criteria	13
Implementation steps	14
Additional elements	16
Point values	16

1. Vision and intent

A Complete Streets vision states a community's commitment to integrate a Complete Streets approach into their transportation practices, policies, and decision-making processes. This vision should describe a community's motivation to pursue Complete Streets, such as improved economic, health, safety, access, resilience, or environmental sustainability outcomes. The vision should acknowledge the importance of how Complete Streets contribute to building a comprehensive transportation network. This means that people are able to travel to and from their destinations in a reasonable amount of time and in a safe, reliable, comfortable, convenient, affordable, and accessible manner using whatever mode of transportation they choose or rely on.

This does not mean putting a bike lane on every street or a bus on every corridor. Rather, it requires decision-makers to consider the needs of diverse modes that use the transportation system, including but not limited to walking, biking, driving, wheeling/rolling, riding public transit, car sharing/carpooling, paratransit, taxis, delivering goods and services, and providing emergency response transportation.

12 points available:

- 3 points: The policy is clear in intent, stating firmly the jurisdiction's commitment to a Complete Streets approach, using "shall" or "must" language. This needs to be in the body of the legislation, not the "whereas" statement.
    - (1 point) – The policy states the jurisdiction "may" or "considers" Complete Streets in their transportation planning and decision-making processes.
    - (0 points) – The policy language is indirect with regard to their intent to apply a Complete Streets approach, using language such as "consider Complete Streets principles or elements."
- 2 points: mentions the need to create a complete, connected, network.
    - (0 points) No mention.
- 2 points: specifies at least one motivation or benefit of pursuing Complete Streets.
    - (0 points) No mention.
- 1 point: specifies equity as an additional motivation or benefit of pursuing Complete Streets.
    - (0 points) No mention.
- 4 points: specifies modes, with a base of four modes, two of which must be biking and walking.
    - (0 points) Policy mentions fewer than four modes and/or omits biking or walking.

2. Diverse users

Complete Streets are intended to benefit all users equitably, particularly vulnerable users and the most underinvested and underserved communities. Transportation choices should be safe, convenient, reliable, affordable, accessible, and timely regardless of race, ethnicity, religion, income, gender identity, immigration status, age, ability, languages spoken, or level of access to a personal vehicle. Which communities of concern are disproportionately impacted by transportation policies and practices will vary depending on the context of the jurisdiction. Policies are not necessarily expected to list all of these groups. For example, some communities are more racially homogeneous, but have extreme income disparities. The best Complete Streets policies will specifically highlight communities of concern whom the policy will prioritize based on the jurisdiction's composition and objectives.

9 points available:

- 5 points: The policy language requires the jurisdiction to "prioritize" vulnerable users or neighborhoods with histories of systematic disinvestment or underinvestment. This could include neighborhoods with insufficient infrastructure or neighborhoods with a concentration of vulnerable users.
    - (3 points) Policy states its intent to "benefit" the neighborhoods or vulnerable users above, as relevant to the jurisdiction.
    - (1 point) Policy mentions or considers any of the neighborhoods or users above.
    - (0 point) No mention.
- 4 points: The policy establishes an accountable, measurable definition for priority groups or places. This definition may be quantitative (i.e. neighborhoods with X% of the population without access to a vehicle or where the median income is below a certain threshold) or qualitative (i.e. naming specific neighborhoods).
    - (0 point) No mention.

3. Commitment in all projects and phases

The ideal Complete Streets policy has a strong commitment that all transportation projects and maintenance operations account for the needs of all modes of transportation and all users of the road network.

10 points available:

For municipality/county policies

- 4 points: Policy requires all new construction and reconstruction/retrofit projects to account for the needs of all modes of transportation and all users of the road network.
    - (1 point) Policy considers or mentions these projects as opportunities to apply this policy.
    - (0 points) No mention.
- 4 points: Policy requires all maintenance projects and ongoing operations, such as resurfacing, repaving, restriping, rehabilitation, or other types of changes to the transportation system to account for the needs of all modes of transportation and all users of the road network.
    - (1 point) Policy considers or mentions these projects as opportunities to apply this policy.
    - (0 points) No mention.

For state/MPO policies

- 4 points: Policy requires all new construction and reconstruction/retrofit projects receiving state or federal funding to account for the needs of all modes of transportation and all users of the road network.
    - (1 point) Policy considers or mentions these projects as opportunities to apply this policy.
    - (0 points) No mention.
- 4 points: Policy requires all maintenance projects and ongoing operations, such as resurfacing, repaving, restriping, rehabilitation, or other types of changes to the transportation system receiving state or federal funding to account for the needs of all modes of transportation and all users of the road network.
    - (1 point) Policy considers or mentions these projects as opportunities to apply this policy.
    - (0 points) No mention.

For all policies

- 2 points: Policy specifies the need to provide accommodations for all modes of transportation to continue to use the road safely and efficiently during any construction or repair work that infringes on the right of way and/or sidewalk.

4. Clear, accountable exceptions

Effective policy implementation requires a process for exceptions to providing for all modes in each project. The exception process must also be transparent by providing public notice with opportunity for comment and clear, supportive documentation justifying the exception. The Coalition believes the following exceptions are appropriate with limited potential to weaken the policy. They follow the Federal Highway Administration's guidance on accommodating bicycle and pedestrian travel and identified best practices frequently used in existing Complete Streets policies.[1]

1. Accommodation is not necessary on corridors where specific users are prohibited, such as interstate freeways or pedestrian malls. Exclusion of certain users on particular corridors should not exempt projects from accommodating other permitted users.
2. Cost of accommodation is excessively disproportionate to the need or probable use. The Coalition does not recommend attaching a percentage to define "excessive," as the context for many projects will require different portions of the overall project budget to be spent on the modes and users expected. Additionally, in many instances the costs may be difficult to quantify. A percentage cap may be appropriate in unusual circumstances, such as where natural features (e.g. steep hillsides, shorelines) make it very costly or impossible to accommodate all modes. The Coalition does not believe a cap lower than 20 percent is appropriate, and any cap should always be used in an advisory rather than absolute sense.
3. A documented absence of current and future need.
4. Emergency repairs such as a water main leak that requires immediate, rapid response; however, temporary accommodations for all modes should still be made. Depending on severity of the repairs, opportunities to improve multimodal access should still be considered where possible.

Many communities have included other exceptions that the Coalition, in consultation with transportation planning and engineering experts, also feels are unlikely to create loopholes:

1. Transit accommodations are not required where there is no existing or planned transit service.
2. Routine maintenance of the transportation network that does not change the roadway geometry or operations, such as mowing, sweeping, and spot repair.
3. Where a reasonable and equivalent project along the same corridor is already programmed to provide facilities exempted from the project at hand.

In addition to defining exceptions through good policy language, there must be a clear process for granting them, preferably with approval from senior management. Establishing this within a policy provides clarity to staff charged with implementing the policy and improves transparency and accountability to other agencies and residents.

[1] https://www.fhwa.dot.gov/environment/bicycle_pedestrian/guidance/design.cfm

8 points available:

- 4 points: Policy includes one or more of the above exceptions—and no others.
    - (2 points) Policy includes any other exceptions, including those that weaken the intent of the Complete Streets policy.
    - (0 points) No mention.
- 2 points: Policy states who is responsible for approving exceptions.
- 2 points: Policy requires public notice prior to granting an exception in some form. This could entail a public meeting or an online posting with opportunity for comment.

5. Jurisdiction

Creating Complete Streets networks is difficult because many different agencies control our streets. They are built and maintained by state, county, and local agencies, and private developers often build new roads. Individual jurisdictions do have an opportunity to influence the actions of others, through funding or development review. In the case of private developers, this may entail the developer submitting how they will address Complete Streets in their project through the jurisdiction's permitting process, with approval of the permit being contingent upon meeting the Complete Streets requirements laid out by the jurisdiction. Creating a Complete Streets network can also be achieved through interagency coordination between government departments and partner agencies on Complete Streets.

8 points available:

For municipality/county policies

- 5 points: A municipality's or county's policy requires private development projects to comply.
    - (2 points) A municipality's or county's policy mentions or encourages private development projects to follow a Complete Streets approach.
    - (0 points) No mention.

For state/MPO policies

- 5 points: A state's or Metropolitan Planning Organization's policy clearly notes that projects that address how they will account for the needs of all modes and users are prioritized or awarded extra weight for funding and/or inclusion in long-range transportation improvement plans (TIPs).
    - (2 points) A state's or MPO's policy mentions or encourages projects receiving money passing through the agency to account for the needs all modes and users.
    - (0 pointes) No mention.

For all policies

- 3 points: Policy specifies a requirement for interagency coordination between various agencies such as public health, housing, planning, engineering, transportation, public works, city council, and/or mayor or executive office.
    - (1 point) Policy mentions or encourages interagency coordination.
    - (0 points) No mention.

6. Design

Complete Streets implementation relies on using the best and latest state-of-the-practice design standards and guidelines to maximize design flexibility. Creating meaningful change on the ground both at the project level and in the creation of complete, multimodal transportation networks requires jurisdictions to create or update their existing design guidance and standards to advance the objectives of the Complete Streets policy.

7 points available:

- 5 points: Policy directs the adoption of specific, best state-of-the-practice design guidance and/or requires the development/revision of internal design policies and guides.
    - (1 point) Policy references but does not formally adopt specific, best state-of-the-practice design guidance.
    - (0 points) No mention.
- 2 points: Policy sets a specific time frame for implementation.
    - (0 points) No mention.

7. Land use and context sensitivity

An effective Complete Streets policy must be sensitive to the surrounding community including its current and planned buildings, parks, and trails, as well as its current and expected transportation needs. Specifically, it is critical to recognize the connection between land use and transportation. Complete Streets must be designed to serve the current and future land use, while land use policies and zoning ordinances must support Complete Streets such as by promoting dense, mixed-use, transit-oriented development with homes, jobs, schools, transit, and recreation in close proximity depending on the context. Given the range of policy types and their varying ability to address this issue, a policy, at a minimum, requires the consideration of context sensitivity in making decisions. The best Complete Streets policies will meaningfully engage with land use by integrating transportation and land use in plans, policies, and practices. The Coalition also encourages more detailed discussion of adapting roads to fit the character of the surrounding neighborhood and development, as well as the consideration of unintended consequences such as displacement of residents due to rising costs of living.

10 points available:

For municipality/county policies

- 5 points: Policy requires new or revised land use policies, plans, zoning ordinances, or equivalent documents to specify how they will support and be supported by the community's Complete Streets vision
    - (4 points) Policy requires new or revised transportation plans and/or design guidance to specify how transportation projects will serve current and future land use, such as by defining streets based not just on transportation function but on the surrounding land use.
    - (2 points) Policy discusses the connection between land use and transportation or includes non-binding recommendations to integrate land use and transportation planning.
    - (1 point) Policy acknowledges land use as a factor related to transportation planning.
    - (0 points) No mention.

For state/MPO policies

- 5 points: Policy requires new or revised long-range transportation plans and/or design guidance to specify how transportation projects will serve current and future land use such as by directing the adoption of place-based street typologies
    - (2 points) Policy discusses the connection between land use and transportation or includes non-binding recommendations to integrate land use and transportation planning.
    - (1 point) Policy acknowledges land use as a factor related to transportation planning.
    - (0 points) No mention.

For all policies

- 3 points: Policy requires the consideration of the community context as a factor in decision-making.
    - (1 points) Policy mentions community context as a potential factor in decision-making.
    - (0 points) No mention.
- 2 points: Policy specifies the need to mitigate unintended consequences such as involuntary displacement.
    - (1 points) Policy acknowledges the possibility of unintended consequences.
    - (0 points) No mention.

8. Performance measures

Communities with Complete Streets policies can measure success a number of different ways, such as miles of bike lanes, percentage of the sidewalk network completed, number of people who choose to ride public transportation, and/or the number of people walking and biking along a street. They can also measure the impact of Complete Streets on the other motivations and objectives specified in the policy, such as health, safety, economic development, resilience, etc. The best Complete Streets policies will establish performance measures in line with the goals stated in their visions. Performance measures should pay particular attention to how Complete Streets implementation impacts the communities of concern identified in the policy. By embedding equity in performance measures, jurisdictions can evaluate whether disparities are being exacerbated or mitigated. Policies should also set forth an accountable process to measure performance, including specifying who will be responsible for reporting on progress and how often these indicators will be tracked.

13 points available:

- 3 points: Policy establishes specific performance measures under multiple categories such as access, economy, environment, safety, and health.
    - (1 point) Policy mentions measuring performance under multiple categories but does not establish specific measures.
    - (0 points) No mention.
- 2 points: Policy establishes specific performance measures for the implementation process such as tracking how well the public engagement process reaches underrepresented populations or updates to policies and documents.
    - (1 point) Policy mentions measuring the implementation process but does not establish specific measures.
    - (0 points) No mention.
- 3 points: Policy embeds equity in performance measures by measuring disparities by income/race/vehicle access/language/etc. as relevant to the jurisdiction.
    - (1 point) Policy mentions embedding equity in performance measures but is not specific about how data will be disaggregated.
    - (0 points) No mention.
- 2 points: Policy specifies a time frame for recurring collection of performance measures.
    - (0 points) No mention.
- 2 points: Policy requires performance measures to be released publicly.
    - (0 points) No mention.
- 1 point: Policy assigns responsibility for collecting and publicizing performance measures to a specific individual/agency/committee.
    - (0 points) No mention.

9. Project selection criteria

A Complete Streets policy should modify the jurisdiction's project selection criteria for funding to encourage Complete Streets implementation. Criteria for determining the ranking of projects should include assigning weight for active transportation infrastructure; targeting underserved communities; alleviating disparities in health, safety, economic benefit, access destinations; and creating better multimodal network connectivity for all users. Jurisdictions should include equity criteria in their project selection process and give the criteria meaningful weight.

8 points available:

- 5 points: Policy establishes specific criteria to encourage funding prioritization for Complete Streets implementation.
    - (1 point) Policy mentions revising project selection criteria to encourage Complete Streets implementation.
    - (0 points) No mention.
- 3 points: Policy specifically addresses how equity will be embedded in project selection criteria.
    - (0 points) No mention.

10. Implementation steps

A formal commitment to the Complete Streets approach is only the beginning. The Coalition has identified key steps to implementation:

1. Restructure or revise related procedures, plans, regulations, and other processes to accommodate all users on every project. This could include incorporating Complete Streets checklists or other tools into decision-making processes.
2. Develop new design policies and guides or revise existing to reflect the current state of best practices in transportation design. Communities may also elect to adopt national or state-level recognized design guidance.
3. Offer workshops and other training opportunities to transportation staff, community leaders, and the general public so that everyone understands the importance of the Complete Streets vision. Training could focus on Complete Streets design and implementation, community engagement, and/or equity.
4. Create a committee to oversee implementation. This is a critical accountability measure, ensuring the policy becomes practice. The committee should include both external and internal stakeholders as well as representatives from advocacy groups, underinvested communities, and vulnerable populations such as people of color, older adults, children, low-income communities, non-native English speakers, those who do not own or cannot access a car, and those living with disabilities.
5. Create a community engagement plan that considers equity by targeting advocacy organizations and underrepresented communities which could include non-native English speakers, people with disabilities, etc. depending on the local context. This requires the use of outreach strategies such as holding public meetings at easily accessible times and places, collecting input at community gathering spaces, and hosting and attending community meetings and events. The best community engagement plans don't require people to alter their daily routines to participate. Outreach strategies should make use of natural gathering spaces such as clinics, schools, parks, and community centers.

15 points available:

- 3 points: Policy requires that related procedures, plans, regulations, and other processes be revised within a specified time frame.
    - (1 point) Policy mentions revising procedures, plans, regulations, and other processes.
    - (0 points) No mention.
- 3 points: Policy requires workshops or other training opportunities for transportation staff. Policy is specific about the timing and/or staff members for the training and workshops.
    - (1 point) Policy mentions workshops or other training opportunities for transportation staff.
    - (0 points) No mention.
- 3 points: Policy assigns responsibility for implementation to a new or existing

committee that includes both internal and external stakeholders that are representative of underinvested and vulnerable communities. Policy is specific about which internal and external stakeholders are/will be represented on the committee.

    - (1 point) Policy assigns oversight of implementation to a specific body that may not include both internal and external stakeholders.
    - (0 points) No mention.

- 6 points: Policy creates a community engagement plan with specific strategies for who, when, and how they will approach public engagement in the project selection, design, and implementation process. Policy specifically addresses how the jurisdiction will overcome barriers to engagement for underrepresented communities.
    - (3 points) Policy creates a community engagement plan with specific strategies for who, when, and how they will approach public engagement but does not address underrepresented communities.
    - (1 point) Policy mentions community engagement but does not go into detail about specific strategies.
    - (0 points) No mention.

Additional elements

While Complete Streets policies are based on the principle of connecting people and place to transportation projects, many communities add language regarding environmental best practices or placemaking directives. Though the Coalition does not score these additional elements, we encourage agencies to consider cross-referencing related initiatives.

Point values

Vision and intent	12 points
Diverse users	9 points
Commitment in all projects and phases	10 points
Exceptions	8 points
Jurisdiction	8 points
Design	7 points
Land use and context sensitivity	10 points
Performance measures	13 points
Project selection criteria	8 points
Implementation steps	15 points
Total:	**100 points**

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Here are a few Complete Streets Links from Kate: (Note that the framework can be used in any size community)

10 Elements of a complete streets policy https://smartgrowthamerica.org/10-elements-of-complete-streets/

Bik Fed Complete Streets graphic https://wisconsinbikefed.org/what-we-do/advocacy/milwaukee-complete-streets-for-all/

City of Madison Complete Streets website
https://www.cityofmadison.com/transportation/initiatives/complete-green-streets

This document highlights communities with good policies and provides model language. https://smartgrowthamerica.org/wp-content/uploads/2019/05/Best-Complete-Streets-Policies-of-2018.pdf