

| Plan Survey  | For  | Joint City/County  | Climate and Equity Task Force  |
|--|--|--|--|
| <p>MMSD Resilience Plan (BLACK TEXT)</p> <p>SEWRPC V 2050</p> <p>2000 people +</p> <p><b>Visioning Activities:</b></p> <p>Telephone/Online Survey<br/>Mapping Important Places<br/>Visual Preference Survey<br/>SWOT Analysis<br/>Sharing Specific Land Use &amp; Transportation Goals</p> <p>=</p> <p><b>15 Guiding Statements:</b></p> | <p><i>(In Action Steps below [20 Actions (selected out of 30)] see this column for Links to other Plans--Identified in this column at end of document)</i></p> <p><i>Green Text are items added by First Editor-BAR</i></p> <p><i>?Red are question marks?</i></p> <p><b>15 Guiding Statements:</b></p> <ol style="list-style-type: none"> <li>1. <i>Strengthen Existing Urban Areas</i></li> <li>2. <i>Achieve More Compact Development</i></li> <li>3. <i>Balance Jobs and Housing</i></li> <li>4. <i>Achieve a Robust, Regional Transit System</i></li> <li>5. <i>Maintain Small Town Character</i></li> <li>6. <i>Develop an Expansive, Well-Connected Bicycle and Pedestrian Network</i></li> <li>7. <i>Preserve Natural Resources and Open Spaces</i></li> <li>8. <i>Preserve Farmland</i></li> <li>9. <i>Ensure that Goods Move Efficiently</i></li> <li>10. <i>Develop an Integrated, Multimodal Transportation System</i></li> <li>11. <i>Provide a High-Quality Network of Streets and Highways</i></li> <li>12. <i>Be Environmentally Responsible</i></li> <li>13. <i>Make Wise Infrastructure Investments</i></li> <li>14. <i>Work Together Toward Common Goals</i></li> <li>15. <i>Prepare for Change in Travel Preferences and Technologies</i></li> </ol> | <p>The recommended <b>actions</b> can be <u>implemented individually or integrated into projects</u>. They are intended to be a <b>menu of options</b> for how to create stronger, more meaningful projects in the face of strained budgets. A stronger more resilient region can only be achieved if we work together. This strategy represents a starting point for a path forward, but the <i>real work will come from the conversations, policies and projects</i> that take place into the future. Our communities can become stronger, they can become resilient, and the risks can be reduced—but only if we all work towards the same goal.</p> <p>SIX TOP RISKS p.27<br/>Identified by 4 step process narrowed down from 12 to 6</p> <p>FINANCIAL CONSTRAINTS<br/>Budget constraints due to tax policy (infrastructure investment, public workforce shortage, etc.</p> <p>SOCIAL EQUITY<br/>Social issue due to segregation: inequalities, crime and violence.</p> <p>VULNERABILITY OF CRITICAL INFRASTRUCTURE<br/>Risk associated with aging infrastructure and infrastructure failure (pipes, buildings, bridges, highways, communication networks, industrial areas, etc.), significant and rising costs of maintenance and repair</p> <p>CLIMATIC HAZARD<br/>Climatic events (flooding, electrical storms and tornadoes, cold naps) which impact existing assets.</p> <p>ABILITY TO ADAPT TO JOB MARKET CHANGES<br/>Risk of non-alignment of skills, competencies and demand. The need to</p> | <p>As projects are identified, <b>key performance indicators</b> should be created to demonstrate how effectively the project is addressing the action it is related to. The indicator should include a <b>baseline, a target/goal, and a timeframe</b> for when the target should be met. Because projects are likely to vary substantially, evaluating the impacts of the Plan is particularly challenging.</p> <p style="text-align: center;"><b>Indicators:</b></p> <p><b>Cost Avoidance</b><br/><i>This relates to the “return on investment” of a project by comparing the capital expenditures invested in the project with the costs incurred if a risk materializes and nothing is done.</i></p> <p><b>Quality of Life</b><br/><i>This relates to the improvement of specific social-based indicators such as housing, income, jobs, education, engagement, health, and life satisfaction.</i></p> <p><b>Environment</b><br/><i>This relates to evaluating the actions by measuring indicators that track impacts on natural systems such as land, air and water.</i></p> <p><b>Population</b><br/><i>This relates to the number of people, or a subsection of the population that benefit from a particular action or project.</i></p> |

|   |  |  |   |
|---|--|--|---|
|   |  | <p>maintain local skills and human capital (competitive workforce training and regional attractively) to an evolving labor market</p> <p>DISTRIBUTION OF PUBLIC SERVICES<br/>Ability of public services to meet basic needs (accessibility, equitability and effectiveness)</p>  |   |
| <p><b>*BACKGROUND*</b></p>  | <p>*****</p>   | <p>*****</p>   | <p>*****</p>  |
| <p>1.1 million people<br/>By 2035 /\ by 16%<br/>Slow growth</p> <p>As of 2019 18 of 28 \/<br/>28 municipalities</p> <p>VISION 2050 recognizes that a thriving future for Southeastern Wisconsin transcends the boundaries of its seven counties and 147 cities, villages, and towns: 57 towns, 61 Villages 29 Cities, 7 counties</p> <p>SEWRPC: 36% of the State's population 34% of the State's jobs</p> | <p><b>Inequality</b></p> <ul style="list-style-type: none"> <li>• 4 county highest BW segregation rate</li> <li>• HS diploma minority 4x&lt; NMinority</li> <li>• NMinority PCI 2x Minority</li> <li>• Minority poverty rate 4x NM</li> </ul> <p><i>NAACP pp. 9 -20</i></p> <p>VISION 2050: Guiding the Vision towns. Regional visioning expands knowledge of the implications of future land use and transportation decisions and engages the community to create a shared vision for the future embraced by Southeastern Wisconsin.</p> <p><a href="http://www.sewrpc.org/SEWRPCFiles/LUTranSysPlanning/2020-02-12-mtg/VISION2050-2020Update-MR-221-2ndEdition-PrelimDraft.PDF">http://www.sewrpc.org/SEWRPCFiles/LUTranSysPlanning/2020-02-12-mtg/VISION2050-2020Update-MR-221-2ndEdition-PrelimDraft.PDF</a></p> <p><u>Racial/Ethnic Disparities (Tables 24-27)</u><br/>In all of the metro areas considered, there are differences in educational attainment, personal income levels, and poverty rates between the white and the minority populations. In all metro areas, the percent of minority adults without a high school diploma or equivalent exceeds the percentage for the adult white population. <b>This disparity is more pronounced in the Milwaukee metro area</b> than most of the other midwest metro areas and many of the other metro areas across the nation. The disparity between white and minority adults holding a bachelor's or greater degree is highest in the Milwaukee area.<br/>In all metro areas, the per capita income for the white population exceeds that of the minority population. As measured by the ratio of white to minority per capita income, <b>the income disparity in the Milwaukee metro area is the largest among both the midwest metro areas and the other metro areas.</b><br/>In all metro areas, the incidence of poverty is greater for the minority population than the white population. <b>The Milwaukee area disparity in this regard is the largest of all the metro areas considered.</b></p> | <p><b>Economic and Ed Disparities</b></p> <p>Outlying:</p> <ul style="list-style-type: none"> <li>• Limited housing</li> <li>• Limited transportation</li> </ul> <p>Less affluent:</p> <ul style="list-style-type: none"> <li>• &lt; neighborhood revitalization</li> <li>• /\ crime rate</li> <li>• /\ unemployment rate</li> </ul> <p>Tackle Climate Change through Tackling Inequality:<br/><a href="https://www.shareable.net/want-to-solve-climate-change-tackle-inequality/?utm_campaign=Solving%20Climate%20Change%2C%20Community%20Broadband%20%26%20P2P%20Energycontent&amp;utm_content=2014-06-17%2002%3A07%3A47&amp;utm_medium=Email&amp;utm_source=VerticalResponse&amp;utm_term=">https://www.shareable.net/want-to-solve-climate-change-tackle-inequality/?utm_campaign=Solving%20Climate%20Change%2C%20Community%20Broadband%20%26%20P2P%20Energycontent&amp;utm_content=2014-06-17%2002%3A07%3A47&amp;utm_medium=Email&amp;utm_source=VerticalResponse&amp;utm_term=</a></p> | <p><b>Economic Challenges</b></p> <ul style="list-style-type: none"> <li>• Long term job loss</li> <li>• Slow recovery from recession</li> </ul> <p><b>Economic success</b></p> <ul style="list-style-type: none"> <li>• 25 firms in Fortune 5000</li> <li>• Port of Milwaukee</li> </ul> |

|   |  |  |   |
|---|--|--|---|
| <p><b>Economic Health:</b></p> <p><b>Doughnut Economics:</b><br/> <a href="https://www.youtube.com/watch?v=Mkg2XMTWV4g">https://www.youtube.com/watch?v=Mkg2XMTWV4g</a></p>   | <p>Manufacturing = 16% of regional employment MKE region in top 50 US Metro areas for manufacturing</p> <ul style="list-style-type: none"> <li>Jobs pay 31% more than average job in region</li> <li>Workforce dev, esp for minorities</li> </ul>  | <p>Challenges:</p> <ul style="list-style-type: none"> <li>2005 Levy limit on property tax for new construction</li> <li>Limit provision of critical services: police, schools, waste collection, water infrastructure, mass transit</li> <li>Areas with little land to develop or redevelop for new construction</li> </ul>  | <p><b>Transportation</b></p> <ul style="list-style-type: none"> <li>Resident connection to employment, education, health care and other</li> <li>Population growth will require replacement and improvement</li> <li>Roadway condition and traffic flow critical for economy and safety</li> <li>VISION 2050: revenues will not be sufficient to reconstruct major roadways</li> </ul>  |
| <p><b>Climate change</b></p> <p>For most of human history, the Earth's atmosphere contained about 275 parts per million of carbon dioxide. More recently, the Earth's atmosphere has been found to contain about 390 parts per million of carbon dioxide...and that number is rising by about 2 parts per million each year. _ _ _ _ _ &gt;</p> | <p><b>Projections:</b></p> <p>Seasonal Impacts</p> <ul style="list-style-type: none"> <li>winter warmer more rain than snow (ice storms)</li> <li>25% increase in large rainstorms</li> <li>most rain in spring and fall</li> <li>more sewer overflows, more polluted stormwater, reduced air quality</li> </ul> <p>-----<br/>         &gt;<br/>         Most scientists (97%) agree that our carbon emissions are likely influencing the Earth's climate. This influence affects the Earth's rainfall patterns, temperature, plant and animal populations, and more. In an urban environment, the impacts of these changes can be magnified because of dense development and more complex infrastructure.</p> | <ul style="list-style-type: none"> <li>Seasonal changes impact transportation and above ground infrastructure</li> <li>Larger rainstorms create more flooding</li> <li>Existing grey infrastructure not designed for these</li> </ul> <p><b>SCR-CDR p 35</b><br/> <b>5.10a Climate Crisis Impacts in Great Lakes Region</b><br/> <i>The climate crisis impacts in the Great Lakes region has led to it being significantly warmer and wetter than other regions of the contiguous U.S. Impacts of these changes include:</i><br/> <i>Chronic flooding, which degrades transportation, water supply, and building infrastructure;</i></p> <ol style="list-style-type: none"> <li>Increased periods of droughts and heavy precipitation, causing significant variability in Great Lakes water levels;</li> <li>Changes in the direction of seasonal wind patterns and "lake-effects" storm events;</li> <li>Shifts in animal and plant species vitality and biodiversity,</li> </ol> | <p>Harbor: <b>SCR CDR: p.29</b></p> <p><b>NAACP pp. 435-436</b><br/> <b>Conclusion: The Urgent Need for Transformative Action</b></p> <p>Circular Economy:<br/> <a href="https://media.sitra.fi/2018/06/12132041/the-circular-economy-a-powerful-force-for-climate-mitigation.pdf">https://media.sitra.fi/2018/06/12132041/the-circular-economy-a-powerful-force-for-climate-mitigation.pdf</a></p> <p><b>A more circular economy</b> is indispensable for meeting global material needs without exceeding the available carbon budget. The Intergovernmental Panel on Climate Change has estimated a remaining 'carbon budget' for this century of around 800 billion tonnes (Gt) CO2. This is the amount of emissions that can be emitted until 2100 for a good chance of keeping warming below 2°C – with still less for the 'well below 2°C' target set by the Paris Agreement. This study estimates that, on current trends, materials production alone would result in more than 900 Gt of emissions. Energy efficiency and low carbon energy will help, but do not resolve this dilemma: emissions add up to 650 Gt even with rapid adoption. This is because so much carbon is either built into the products themselves and then released at their end of life (plastics), or is inherent to the process chemistry of production (steel, cement). For context, note that 2°C scenarios typically 'allocate' about 300 Gt CO2 to these sectors for the total world economy.</p> <p><b>Options to get to 300 Gt</b> include a) aggressive scale-up of carbon capture and storage; b) the rapid introduction of radical process changes that are currently in early development stages; and c) reducing demand for primary materials through the range of</p> |

|  |  |   |   |
|--|--|---|---|
|  |  | <p><i>particularly in those species dependent on cold climates;</i></p> <ol style="list-style-type: none"> <li>4. <i>Increased incidents of harmful algal blooms (HABs)- which are proliferations of species of algae that decrease oxygen concentrations in the waters resulting in “dead zones” and may produce toxins that are harmful to humans and animals- resulting in increased incidents of fish kills;</i></li> <li>5. <i>Greater proliferation of invasive species of plants, animals, fish, and microorganisms; and</i></li> <li>6. <i>Adverse impacts to local and regional economies that are dependent on winter recreational and tourism income.</i></li> </ol> <p><i>Climate-related chronic flooding in the Great Lakes region is degrading water quality in urban centers by increasing pollution from stormwater runoff and burdening the freshwater and wastewater treatment systems. Elevated concentrations of lead, other contaminants, E.Coli, and other pathogens are being found in urban drinking water supplies. In rural areas, chronic flooding degrades regional water quality by increasing runoff from concentrated animal feeding operations (CAFOs) such as hog and chicken farms and heavily worked agricultural soils containing farming-related contaminants (herbicides, pesticides, fertilizers, and others). Surface water pollution from these non-point sources include pathogens, sediments, nutrients, lead, minerals, and many other contaminants. Groundwater basins connected to the Great Lakes are also receiving these contaminants and spreading pollution impacts throughout the watershed.</i></p> <p><i>During the climate crisis, the rural areas of the Great Lakes region is negatively affected</i></p> | <p><i>circularity measures discussed above. (p.7)</i></p> <p>How can we achieve sustainability for people and planet? Rounding the pillars is about bending the silos into circles and building community. Transitioning to a circular economy creates opportunities to make our societies more inclusive, accessible, and sustainable by bringing together the principles of social engagement and economic opportunity. From rethinking our relationship to resources to developing new methods of collaboration and community-building, circular economy has the potential to serve as a catalyst for regenerative social, economic, and environmental progress.</p> <p>But where will these changes take place? What social and physical frames best support this fundamental transformation of citizen engagement? And what role can the stories of space play in defining our communities of tomorrow? The event is part of Ecologic Institute’s POCACITO project and co-hosted by WasteCap Resource Solution</p> <p>An event took place in October 2019 in MKE at which Erick Shambarger spoke. POCACITO (Post-Carbon-Cities of Tomorrow) is an initiative of Ecologic Institute, non-profit center for transatlantic sustainability and environmental progress based in Washington, DC, co-funded by the European Union. For more information, contact <a href="mailto:brendan@pocacito.org">brendan@pocacito.org</a>.</p> <p><b>Resources for Emergency Climate Declaration</b></p> <p><a href="https://docs.google.com/document/d/1dA3Jnx4xlrqrMrlyITdtD_WBBynr_UuU-cjuZpyW7Gts/edit">https://docs.google.com/document/d/1dA3Jnx4xlrqrMrlyITdtD_WBBynr_UuU-cjuZpyW7Gts/edit</a></p> <p><a href="https://docs.google.com/document/d/1dA3Jnx4xlrqrMrlyITdtD_WBBynr_UuU-cjuZpyW7Gts/edit">https://docs.google.com/document/d/1dA3Jnx4xlrqrMrlyITdtD_WBBynr_UuU-cjuZpyW7Gts/edit</a></p> <p><a href="https://www.theclimatemobilization.org/green-new-deal-climate-emergency-resolution">https://www.theclimatemobilization.org/green-new-deal-climate-emergency-resolution</a></p> |
|--|--|---|---|

|   |   |  |  |
|---|---|--|--|
|   |   | <i>by lower water levels in the Great Lakes, and their associated rivers and streams. In periods of drought, the natural aquifers' replenishment will be significantly reduced while water usage will increase possibly resulting in severe limitations on the availability of potable water in this region.</i>   |  |
| <b>Stakeholder process:</b>   | <p>Six risks (out of 12)</p> <ul style="list-style-type: none"> <li>• Aging infrastructure</li> <li>• Drinking water supply</li> <li>• Economic hazards( job availability, succession plan)</li> <li>• Flooding extreme weather events</li> <li>• Impacted quality of life from lack of services and //traffic</li> <li>• Limited public financing –state levy limits</li> </ul> <p><i>NAACP pp. 25-58+<br/>Module 1: A Community Coming Together pp. 77-152+<br/>Module 3: Developing a Community Climate Adaptation Plan pp. 153-169+<br/>Module 4: Passing Climate Resilience Policies</i></p> | <b>Plan review:</b>  | <p>6 risks grouped (out of 200)</p> <ul style="list-style-type: none"> <li>• Financial Constraints: Budget restraints due to tax policy (infrastructure investment, public workforce shortage, etc.)</li> <li>• Social Equity: Social issues due to segregation: inequalities, crime and violence (<b>Trauma</b>)</li> <li>• Vulnerability of Critical Infrastructure: Risk associated with aging infrastructure and infrastructure failure, significant and rising costs of maintenance and repair</li> <li>• Climatic hazard: Climatic event which impact existing assets (<b>people?</b>)</li> <li>• Ability to Adapt to Job Market Changes: Risk of non-alignment of skills, competencies and demand. The need to maintain local skills and human capital to an evolving labor market</li> <li>• Distribution of public services: Ability of public services to meet basic needs(access, equity, effective)</li> </ul> <p><b>Mitigation<br/>Adaptation<br/>Suffering</b></p> |
| <b>Vision 1</b>   | <b>Environment</b>  | <b>and</b>   | <b>Society</b>   |
| Make the Milwaukee region a better place to live by improving the public's participation in decision making and their environment | <p>Improve dialogue with residents and key stakeholders<br/>Actions 1-4<br/><i>NAACP pp. 59-76<br/>Module 2: Building Social Cohesion NAACP pp. 170-198+<br/>Module 5: Communicating For Impact NAACP pp. 199-212<br/>Module 6: Educating and Organizing for Climate Resilience NAACP pp. 214-223<br/>Module 7: Democracy and Governance NAACP pp. 331-345<br/>Module 12: Gender and LGBTQ Responsive Climate Resilience</i></p>  | <p>Katherine Hayhoe: Conversations <i>Global Weirding</i><br/><b>Bonding:</b> Shared Values - seek<br/><b>Connection:</b> Connect to Climate Change<br/><b>Inspire:</b> Practical solutions<br/>Hope: We act and see others act<br/>Next generation needs<br/>Actions by individual, governments, business, NGOs<br/>Join with others</p> <p>TED Talk How to turn Climate Anxiety into Action.<br/>Not control outcomes/ Do what we can do<br/>Not fear and anxiety – bring out fear and seek what can we do</p> | <p><a href="https://www.smartcitiesdive.com/news/3-ways-city-leaders-drive-behavior-change-meeting-of-the-minds/572608/">https://www.smartcitiesdive.com/news/3-ways-city-leaders-drive-behavior-change-meeting-of-the-minds/572608/</a></p> <p><b>From Africa:</b> <a href="https://africa.iclei.org/uncategorized/equipping-coastal-african-cities-with-the-tools-they-really-need-for-climate-change-planning/?utm_source=Confirmed+iNews+subscribers&amp;utm_campaign=1ff37c475a-EMAIL_CAMPAIGN_2020_03_03_01_25_COPY_04&amp;utm_medium=email&amp;utm_term=0_eb2a8ff6e2-1ff37c475a-119970177">https://africa.iclei.org/uncategorized/equipping-coastal-african-cities-with-the-tools-they-really-need-for-climate-change-planning/?utm_source=Confirmed+iNews+subscribers&amp;utm_campaign=1ff37c475a-EMAIL_CAMPAIGN_2020_03_03_01_25_COPY_04&amp;utm_medium=email&amp;utm_term=0_eb2a8ff6e2-1ff37c475a-119970177</a></p>  |

|  | Promote a safe and sustainable community<br>Actions 5-7  |  |  |
|--|--|--|--|
| Actions  | Goal/ Plan Links   | Risks Addressed  | Objective/Status/ *Lead #Implement   |
| <p><b>Identify</b></p> <p><u>Action 1</u></p> <p>P 40.</p> | <p>Gaps that may exist in Current Partnerships And/Or Employment Sectors To Create More Meaningful and Intentional Relationships</p> <p><i>City of West Allis Five Year Strategic Plan: 2017 –2021.</i><br/><i>NAACP pp.</i></p> <p><a href="https://ppi.communityadvocates.net/policy-projects/milwaukee-brighter-futures-initiative.html">https://ppi.communityadvocates.net/policy-projects/milwaukee-brighter-futures-initiative.html</a></p> <p><a href="https://ppi.communityadvocates.net/policy-projects/alliance-for-wisconsin-youth.html">https://ppi.communityadvocates.net/policy-projects/alliance-for-wisconsin-youth.html</a></p> | <ul style="list-style-type: none"> <li>• SOCIAL EQUITY</li> <li>• ABILITY TO ADAPT TO JOB MARKET CHANGES</li> <li>• DISTRIBUTION OF PUBLIC SERVICES</li> </ul> | <p>Leverage existing partnerships and identify new opportunities with stakeholders to create and expand meaningful employment and job training opportunities.</p> <p><i>To be scaled up</i></p> <p>*Municipalities *Non Profit/Business partner</p> <p>#1. Identify existing local initiatives/partnerships</p> <p>#2. Establish intentional stakeholder partnerships and create a one-stop shop to fill gaps</p> <p>#3. Identify gaps that exist</p> <p>Downtown development /Central City Neighborhoods:<br/><a href="https://urbanmilwaukee.com/2019/12/17/eyes-on-milwaukee-can-downtown-boom-boost-poorer-areas/">https://urbanmilwaukee.com/2019/12/17/eyes-on-milwaukee-can-downtown-boom-boost-poorer-areas/</a></p> |
| <p><b>Create</b></p> <p><u>Action 2</u></p>                | <p>A Regional Resilience Resource Center That Can Serve As A Space For Consolidated Community Resources</p>  | <ul style="list-style-type: none"> <li>• SOCIAL EQUITY</li> </ul>  | <p>Promote resilience at the local level and across the region by creating a resource center with consolidated information and services.</p> <p><i>New Action</i></p> <p>*Municipalities</p> <p>#1. Create inventory of programs and events</p> <p>#2. Consolidate existing programs and events into a single space</p> <p>#3. Identify new needs and opportunities for information and services</p> <p>#4. Create community mapping plan</p> <p>#5. Advertise and promote events</p>  |
| <p><b>Engage</b></p> <p><u>Action 3</u></p>                | <p>Stakeholders In Collaborative Decision Making And Implementation Of Watershed Restoration &amp; Water Quality Plans</p> <p><i>SEWRPC Community Assistance Planning Report No. 316, A Restoration Plan for the Root River Watershed</i></p> <p><i>RFMKE:</i><br/><i>Water p21 88% of Target</i></p>  | <ul style="list-style-type: none"> <li>• CLIMATIC HAZARD</li> <li>• SOCIAL EQUITY</li> </ul>   | <p>Engage stakeholders (both professional and public) in decision-making around the connections between land, water and people.</p> <p><i>To Be Scaled Up Ongoing</i></p> <p>*Municipalities</p> <p>*Non-pro t/ Business Partner</p> <p>*MMSD</p> <p># Create engagement strategy and project milestones</p> <p># Ensure stakeholders understand the problem</p> <p># Present options and provide meaningful ways for decision making</p> <p># Incorporate multi-faceted quality of life components</p> <p><i>RFMKE pp 31 -33</i><br/><i>Water Sustainability Challenges</i></p> <ul style="list-style-type: none"> <li>• <i>Climate change increases the risk of extreme storms, which places increased</i></li> </ul>      |

|  |  |  |  |
|--|--|--|--|
|  | <i>MMSD Biodiversity Plan. P 48 -52</i>  |  | <p><i>risk of flooding. It also increases the risk of basement back-ups or combined sewer overflows.</i></p> <ul style="list-style-type: none"> <li><i>Milwaukee's rivers cross watersheds and municipal boundaries. Cleaning up the rivers requires a multi-jurisdictional approach.</i></li> <li><i>Because of the Flint water crisis, the public is increasingly focused on lead service lines and plumbing on private property. Because the public system and private network of water distribution are connected, the public is looking for government solutions. The City is taking this challenge on based on the best available science, but the scale of the issue is large relative to available funding.</i></li> <li><i>Microplastics, PFAs, and other emerging pollutants in the water supply must be monitored and treated if they exceed unsafe levels.</i></li> <li><i>Public communication on the state of river water quality and efforts to restore the river could be improved across agencies.</i></li> </ul>   |
| <p><b>Improve</b></p> <p><u>Action 4</u></p> | <p>Local Efforts To Improve Communities By Replacing Grey Impervious Surfaces With Green Spaces</p> <p><i>depave is a non-profit organization in Portland, Oregon</i><br/> <i>Reflo: Sustainable Water Solutions: GSCM SCR-CDR</i><br/> <i>3.2a Prioritize Green Infrastructure</i><br/> <i>*Impervious pavement in cities exacerbates the urban heat island, leads to more localized flooding, disrupts natural systems, and generally reduces the overall quality of life for nearly all residents (i.e., humans, animals, and plants). As such, local communities should prioritize the installation and maintenance of green infrastructure (e.g., bioswales, rain gardens, green streets, parks and street trees, green roofs, green ways, and permeable pavements) to manage stormwater, mitigate heat, increase biodiversity, increase carbon dioxide removal, and enhance the overall quality of life.</i></p> <p><i>NAACP pp. 359-369</i><br/> <i>Module 14: Land Use Planning and Management</i></p> | <ul style="list-style-type: none"> <li>• SOCIAL EQUITY</li> <li>• ABILITY TO ADAPT TO JOB MARKET CHANGES</li> <li>• DISTRIBUTION OF PUBLIC SERVICES</li> <li>• VULNERABILITY OF CRITICAL INFRASTRUCTURE</li> </ul> | <p>Reduce stormwater runoff , energy costs, impacts of climate change, and the urban heat island effects.</p> <p><i>To Be Scaled Up</i></p> <p>*Municipalities<br/>         *Non-profit/ Business Partner<br/>         *MMSD</p> <p># Identify and prioritize publicly owned parcels with substantial impervious space<br/>         # Increase funding that can support investments in green space and associated co-benefits<br/>         # Identify and eliminate duplication effort and waste<br/>         #Implement projects that meet multiple triple bottom line objectives (i.e., social, environmental and economic)<br/>         # Share best management practices with other partners</p> <p><b>RFMKE: pp21-23</b><br/> <b>Land and Urban Ecosystem Sustainability Challenges</b></p> <ul style="list-style-type: none"> <li><i>While fossil fuels have received significant attention for the role they play in climate change, less attention has been paid to their role in polluting the land. Defunct gas station sites that had leaking underground storage tanks make redeveloping many vacant sites more expensive and challenging.</i></li> <li><i>From 2015-2018, the State of Wisconsin has prioritized State subsidies to transform rural and ex-urban land for redevelopment over industrial redevelopment opportunities in existing urban areas. Targeting state subsidies to existing urban areas could spur quicker redevelopment and job creation while conserving our natural eco-systems.</i></li> </ul> <p><b>MWC BO see website (in process)</b></p> |
| <p><b>Access</b></p>                         | <p>Additional Healthy Food Programs So More Residents Have Access To Fresh, Locally-Sourced Foods</p>  | <ul style="list-style-type: none"> <li>•</li> </ul>  | <p>Expand programs to promote access to local and healthy food.</p> <p><i>To Be Scaled Up</i></p> <p>*Municipalities<br/>         *Non-profit/ Business Partner</p>  |



|                                       |  |   |  |
|---------------------------------------|--|---|--|
| <p><u>Action 5</u></p>                | <p>Sixteenth Street Community Health Centers:<br/>         Healthy Choices Program<br/>         Core El Central<br/>         Victory Garden Initiative<br/>         We Got This!<br/>         Alice's Garden<br/>         Walnut Way<br/>         MKE City Healthy Food Initiative (\$400,000)<br/>             Burleigh Street Corridor Project<br/>             Mt Calvary Community Gardens<br/>             Parklawn Assembly of God</p> <p>NAACP pp. 312-330<br/> <b>Module 11: Food Systems</b></p> <p>USDA</p> <p><a href="https://urbanmilwaukee.com/pressrelease/botanic-a-galactica-in-walkers-point-will-host-a-discussion-series-on-accessibility-in-wellness/">https://urbanmilwaukee.com/pressrelease/botanic-a-galactica-in-walkers-point-will-host-a-discussion-series-on-accessibility-in-wellness/</a></p> <p>Food Systems: Wichita</p> <p><a href="https://www.wichita.gov/FoodPlan/Documents/FoodSystemInfographic.pdf">https://www.wichita.gov/FoodPlan/Documents/FoodSystemInfographic.pdf</a></p> <p>World View Agroecology:<br/> <a href="https://foodfirst.org/wp-content/uploads/2020/02/FoodFirstBackgrounderAgroecologyTransformations_Feb21.pdf">https://foodfirst.org/wp-content/uploads/2020/02/FoodFirstBackgrounderAgroecologyTransformations_Feb21.pdf</a></p> |   | <p><b>RFMKE:</b> pp 14-16<br/>         Food System Sustainability Challenges</p> <ul style="list-style-type: none"> <li>• Urban gardening has many benefits and can provide supplemental fresh and healthy food during summer months. However, urban agriculture continues to face challenges with aggregating this food and reliably distributing it to large institutions year-round. Farming on disaggregated urban lots is also often not cost-competitive with regional rural farms, which themselves often struggle to be profitable.</li> <li>• It is challenging to attract full and retain service grocery stores into lower income neighborhoods.</li> <li>• Some urban agriculture organizations are beginning to shift their focus away from healthy food and toward industrial hemp and CBD oil.</li> <li>• The issue of healthy food access is being addressed by multiple departments including the Health Department, Department of City Development, and ECO with limited resources. –With help from Milwaukee Food Council working with Alderman Rainey</li> </ul> <p>UN Development Goals with Food as central focus<br/> <a href="https://www.stockholmresilience.org/research/research-news/2016-06-14-how-food-connects-all-the-sdgs.html">https://www.stockholmresilience.org/research/research-news/2016-06-14-how-food-connects-all-the-sdgs.html</a></p> |
| <p>Improve</p> <p><u>Action 6</u></p> | <p>Public Spaces, Community Health And Reduce Crime Through Environmental Design</p> <p>30th Street Corridor flood relief project—<br/>         Milwaukee, WI<br/>         RFMKE p23 100% of Target Home Grown pp34-35</p>   | <ul style="list-style-type: none"> <li>• SOCIAL EQUITY</li> <li>• VULNERABILITY OF CRITICAL INFRASTRUCTURE</li> </ul> | <p>Improve the quality of life for residents and reduce crime by altering the physical design of public and private spaces.</p> <p>New Action</p> <p>*Municipalities</p> <p># Identify priority areas based on population, available space, and planned expenditures</p> <p># Create comprehensive plans that take into account all aspects—the public should be engaged at all stages of planning</p> <p># Create and implement a phased approach for public space redevelopment</p> <p># Amend land use regulations, such as zoning ordinances, to incorporate CPTED principles</p>  |
| <p>Increase</p>                       | <p>Access To And Understanding Of Existing</p>   | <ul style="list-style-type: none"> <li>• DISTRIBUTION OF PUBLIC</li> </ul>  | <p>Increase awareness and use of community resources to improve the quality of life for</p>  |



|  |   |  |   |
|--|---|--|---|
| <p><u>Action 7</u></p>   | <p>Resources By Connecting Residents To Available Community Resources</p> <p><i>Community</i><br/> <i>Advocates: <a href="https://ppi.communityadvocates.net/policy-projects/healthy-housing-initiative.html">https://ppi.communityadvocates.net/policy-projects/healthy-housing-initiative.html</a></i></p>            | <p>SERVICES</p> <ul style="list-style-type: none"> <li>• SOCIAL EQUITY</li> </ul>                            | <p>vulnerable populations.</p> <p><i>New Action</i><br/> <i>To Be Scaled Up</i><br/>                     * Municipalities<br/>                     #Identify resources offered for your community<br/>                     #Create communication platform to increase awareness<br/>                     #Promote use through integration with existing outreach efforts</p>  |
| <p>Expand</p> <p><u>Action 8</u></p>                           | <p>The Existing Litter Pickup Programs And Change Behaviors Through Targeted Communication Campaigns</p> <p><i>Keep America Beautiful</i><br/> <i>Keep Greater Milwaukee Beautiful</i><br/> <i>Riverkeepers</i><br/> <i>Plastic Free MKE</i></p> <p><i>NAACP pp.408-422</i><br/> <i>Module 18: Waste Management</i></p> | <ul style="list-style-type: none"> <li>• DISTRIBUTION OF PUBLIC SERVICES</li> <li>• SOCIAL EQUITY</li> </ul> | <p>Empower and educate residents in order to reduce the amount of litter in public spaces and on the street and take pride in their community.</p> <p><i>To Be Scaled Up</i><br/>                     #Create Adopt-A-Street program/<br/>                     #Contract out litter pickup with workforce development agency<br/>                     # Municipalities provide containers to households<br/>                     # Cigarette butt campaign to reduce litter<br/>                     #Promote Adopt a Drain</p> |
| <p><b>Vision 2</b></p>   | <p><b>Economy</b></p>   | <p>and</p>   | <p><b>Society</b></p>   |
| <p>Boost the region’s economic vitality through innovative</p> | <p><i>NAACP pp. 224-237</i><br/> <i>Module 8: Economic Justice</i></p>  |  | <p>Health and Equity across sectors:<br/> <a href="https://www.changelabsolutions.org/sites/default/files/2019-04/Blueprint-For-">https://www.changelabsolutions.org/sites/default/files/2019-04/Blueprint-For-</a></p>   |

|  |   |  |  |
|--|---|--|--|
| job creation and access to equal opportunities       | <p><b>SEWRP:</b><br/> <a href="https://www.sewrpc.org/SEWRPCFiles/CommissionFiles/CommitteeFiles/2013/2013-04-16-minutes-ejtf-att-01.pdf">https://www.sewrpc.org/SEWRPCFiles/CommissionFiles/CommitteeFiles/2013/2013-04-16-minutes-ejtf-att-01.pdf</a></p>   |  | <p><a href="#">Changemakers_FINAL_201904.pdf</a></p>   |
| <p><b>Launch</b></p> <p><u>Action 9</u></p>          | <p>A Utilities Efficiency Program To Improve Low-Income Housing And Boost Employment</p> <p>-Milwaukee Energy Efficiency (Me2)program aimed at financing energy saving improvements<br/> -TIN (Targeted Investment Neighborhood) program designed to sustain and increase owner-occupancy<br/> NAACP pp. 346-358+<br/> <b>Module 13: Housing</b></p>  | <ul style="list-style-type: none"> <li>• ABILITY TO ADAPT TO JOB MARKET CHANGES</li> <li>• SOCIAL EQUITY</li> <li>• DISTRIBUTION OF PUBLIC SERVICES</li> </ul> | <p>Create workforce development opportunities and improve low-income housing by creating and expanding training programs for under- and unemployed residents.</p> <p><i>New Action</i><br/> <i>To Be Scaled Up</i><br/> *Municipalities<br/> # Steps for implementation will be identified with partners.</p> <p><b>RFMKE: pp17-19</b><br/> <b>Land and Urban Ecosystem Sustainability Challenges</b></p> <ul style="list-style-type: none"> <li>• <i>Targeting state subsidies to existing urban areas could spur quicker redevelopment and job creation while conserving our natural eco-systems.</i></li> </ul> |
| <p><b>Create/Connect</b></p> <p><u>Action 10</u></p> | <p>Job Training / Shadowing Program With The Schools And Major Employers In The Region</p> <p>Milwaukee 7 Talent Partnership GROW HERE Campaign<br/> Illinois:<br/> <a href="http://blogs.edf.org/energyexchange/2019/05/30/illinois-clean-energy-jobs-act-taps-power-of-energy-efficiency/">http://blogs.edf.org/energyexchange/2019/05/30/illinois-clean-energy-jobs-act-taps-power-of-energy-efficiency/</a></p> <p><a href="https://ppi.communityadvocates.net/policy-projects/milwaukee-transitional-jobs-project.html">https://ppi.communityadvocates.net/policy-projects/milwaukee-transitional-jobs-project.html</a></p> <p><a href="https://ppi.communityadvocates.net/policy-projects/smart-reentry.html">https://ppi.communityadvocates.net/policy-projects/smart-reentry.html</a></p> | <ul style="list-style-type: none"> <li>• ABILITY TO ADAPT TO JOB MARKET CHANGES</li> <li>• SOCIAL EQUITY</li> <li>• DISTRIBUTION OF PUBLIC SERVICES</li> </ul> | <p>Identify opportunities to connect youth with companies to introduce them to a variety of jobs through hands-on job training and shadowing programs.</p> <p><i>New Action</i><br/> <i>To Be Scaled Up</i><br/> *Municipalities<br/> *Non-pro t/ Business Partner<br/> #Identify existing programs and gaps<br/> #Create partnerships with schools and employers<br/> #Promote to schools and students</p>  |
| <p><b>Develop</b></p> <p><u>Action 11</u></p>        | <p>Entrepreneurship Opportunities With Direct Links To Water And Energy Technologies That Meet Future Job Needs</p> <p><i>Municipal Strategic Plans:</i><br/> -Grow Milwaukee's cluster of energy efficient and clean tech companies to create local jobs and exports (ReFresh Milwaukee Plan)<br/> -Advance efforts to plan for and accommodate spin-off businesses generated by the Research</p>  | <ul style="list-style-type: none"> <li>• ABILITY TO ADAPT TO JOB MARKET CHANGES</li> <li>• VULNERABILITY OF CRITICAL INFRASTRUCTURE</li> </ul>                 | <p>Support the emergence and reinforcement of entrepreneurship and innovation to adapt to market changes in the water and energy sectors.</p> <p><i>New Action</i><br/> <i>To Be Scaled Up / Ongoing</i><br/> *Non-profit/ Business Partner<br/> #Identify the synergies between the water and energy sectors' stakeholders<br/> #Build a joint entrepreneurship program 4 based on the identified needs<br/> #Accompany and mentor startups<br/> # Develop internship programs</p> <p>Brain Drain? :</p>  |

|                                 |  |   |   |
|---------------------------------|--|---|---|
|                                 | <i>Park and educational institutions (Wauwatosa)</i>   |   | <a href="https://www.wpr.org/sites/default/files/recommendations_on_alleviating_human_capital_flight_from_milwaukee_and_its_government_final_final_june_21_2019.pdf">https://www.wpr.org/sites/default/files/recommendations_on_alleviating_human_capital_flight_from_milwaukee_and_its_government_final_final_june_21_2019.pdf</a><br><br><a href="https://www.wpr.org/proposed-millennial-task-force-would-work-limit-milwaukee-brain-drain">https://www.wpr.org/proposed-millennial-task-force-would-work-limit-milwaukee-brain-drain</a>  |
| Support<br><br><i>Action 12</i> | The Creation Of And Training For Jobs Related To Sustainability In Specific Industries And Trades<br><br>GI: <a href="https://ngicp.org">https://ngicp.org</a><br><br><a href="https://www.jff.org/what-we-do/">https://www.jff.org/what-we-do/</a><br><br><a href="https://ppi.communityadvocates.net/policy-projects/healthy-workers-healthy-wisconsin.html">https://ppi.communityadvocates.net/policy-projects/healthy-workers-healthy-wisconsin.html</a>   | <ul style="list-style-type: none"> <li>• ABILITY TO ADAPT TO JOB MARKET CHANGES</li> <li>• SOCIAL EQUITY</li> </ul> | Promote, adjust and create jobs related to sustainability.<br><i>Ongoing</i><br>*Municipalities<br>*Non-profit/ Business Partner<br>*MMSD<br>#Partner with public agencies<br>#Develop training and certification programs<br>#Establish partnerships with private sector<br>#Support creation and development of businesses that can supply workers<br>#Develop policy that guides opportunities to impacted communities   |
| Create<br><br><i>Action 13</i>  | Pathways To Career Success For Young Men And Women Of Color<br><br><i>Oakland, CA</i><br><i>The City of Oakland is advancing the My Brother's Keeper Local Action Plan. As part of Oakland Promise, the city is going to launch Future Centers, which are college and career hubs on middle-school and high-school campuses.</i><br><i>They will provide support to these students to develop college and career plans. Future Centers will also help connect students with financial aid, scholarships, and internships.</i><br><i>The "Classroom2Careers" program will offer meaningful opportunities for youth to gain real-world internship experience.</i><br><br><a href="https://urbanmilwaukee.com/pressrelease/bradley-tech-high-school-to-kickoff-job-training-program-with-rehab-of-historic-eagleknit-building/">https://urbanmilwaukee.com/pressrelease/bradley-tech-high-school-to-kickoff-job-training-program-with-rehab-of-historic-eagleknit-building/</a> | <ul style="list-style-type: none"> <li>• ABILITY TO ADAPT TO JOB MARKET CHANGES</li> <li>• SOCIAL EQUITY</li> </ul> | Increase job opportunities for people of color to reduce social inequalities.<br><i>To Be Scaled Up</i><br>Region<br>Non-profit/ Business Partner<br>#Create mentor program to connect students to volunteer mentors from local businesses, organizations and associations<br>#Develop professional skills like goal setting, communication and time management<br>#Provide career exploration in partnership with local universities<br><br><i>RFMKE: pp 17-19</i><br><i>1. Human Capital Sustainability Challenges</i><br><i>Developing a consistent stream of green job opportunities for Milwaukee residents remains a challenge. As the City and Milwaukee County face long term fiscal challenges, employment opportunities in traditional green jobs in Forestry and Park Maintenance have retracted. Many environmental sustainability programs are funded through sporadic and short-term grants, which makes it difficult to build in enough time to both train a cohort of workers, directly employ them through a private sector employer, and allow them to deliver the grant requirements in a timely manner.</i><br><br><i>Create a state-funded and state-run AmeriCorps- like program to coordinate resilience WAASL</i> |
| Design                          | A Suite Of Inclusive Business Development Services To Help Entrepreneurs Of Color Gain   | <ul style="list-style-type: none"> <li>• ABILITY TO ADAPT TO JOB MARKET CHANGES</li> </ul>                          | Create a diverse and thriving job base that supports communities of color.<br><i>New Action</i>   |

|   |  |  |  |
|---|--|--|--|
| <p><u>Action 14</u></p>   | <p>Equal Footing In The Milwaukee Region's Economy</p> <p><i>The African American Chamber of Commerce of Wisconsin seeks to help grow and support African American-owned businesses by providing access to capital, education and advocacy through capacity building and strategic partnership.</i></p> <p><i>NAACP pp. 370-381</i><br/><i>Module 15: Restorative/Criminal Justice</i></p>   | <ul style="list-style-type: none"> <li>• SOCIAL EQUITY</li> </ul>  | <p>*Region<br/>*Non-pro t/ Business Partner<br/>#Scale up existing disadvantaged business development programs (City of Milwaukee &amp; MMSD already have programs)</p> <p><a href="https://urbanmilwaukee.com/pressrelease/american-family-insurance-supports-milwaukee-revitalization-efforts-at-sherman-phoenix/">https://urbanmilwaukee.com/pressrelease/american-family-insurance-supports-milwaukee-revitalization-efforts-at-sherman-phoenix/</a></p> <p>Downtown development /Central City Neighborhoods:<br/><a href="https://urbanmilwaukee.com/2019/12/17/eyes-on-milwaukee-can-downtown-boom-boost-poorer-areas/">https://urbanmilwaukee.com/2019/12/17/eyes-on-milwaukee-can-downtown-boom-boost-poorer-areas/</a></p>  |
| <p><b>Vision 3</b></p> <p>Adapt infrastructure to the challenges of the 21<sup>st</sup> century</p> | <p><b>Infrastructure</b></p>   | <p>and</p>   | <p><b>Environment</b></p>  |
| <p>Develop</p> <p><u>Action 15</u></p>  | <p>And Implement Sustainable Practices Through Bids And Businesses Across The Region</p> <p><i>-Implement sustainable building practices and standards for development and major redevelopment (ReFresh Milwaukee Plan)</i><br/><i>-Improve the physical condition of deteriorating and blighted city, residential, and commercial buildings (ReFresh Milwaukee Plan)</i><br/><i>-Encourage green building practices for redevelopment of sites in the Village including practices that promote energy conservation, stormwater management, and improved air quality (Fox Point)</i></p> | <ul style="list-style-type: none"> <li>• ABILITY TO ADAPT TO JOB MARKET CHANGES</li> <li>• VULNERABILITY OF CRITICAL INFRASTRUCTURE</li> </ul> | <p>Integrate energy, waste, and sustainable material components into RFPs and/or bids.</p> <p><i>Ongoing</i><br/>*Municipalities<br/>*Non-profit/ Business Partner<br/>*MMSD<br/>#Steps for implementation will be identified with partners, such as:<br/>+Adopting green construction codes for commercial buildings<br/>+Improving the physical condition of deteriorating cities, including residential and commercial buildings<br/>+Encouraging green building practices for redevelopment of sites in the region<br/>+Integrating energy, waste, and sustainable material components into RFPs and/or bids (Envision)</p> <p><b>RFMKE:</b> pp 28-30<br/><i>Resource Recovery Sustainability Challenges</i><br/><i>1,800+ students and 170 adults attended educational programs in 2018.</i></p> <ul style="list-style-type: none"> <li>• <i>In 2017, China implemented the “National Sword” policy which set strict contamination standards and restricted imports of recyclable materials. While Milwaukee remains committed to its robust recycling program, relying chiefly on domestic mills, market prices for recyclables have declined. Revenue from recyclables is expected to decrease in 2019.</i></li> <li>• <i>The Department of Public Works provides recycling collection for 1-4 unit households in the City of Milwaukee. Commercial facilities such as businesses and 5+ residential units are required by state law and Milwaukee ordinance to secure recycling services for their properties. However, as the Wisconsin Department of Natural Resources Responsible Unit (RU) for the City of Milwaukee, the Department of Public Works continues to receive reports of non-compliance at commercial properties and is responsible for oversight and</i></li> </ul> |

|  |  |  |   |
|--|--|--|---|
|  |  |  | <p><i>enforcement.</i></p> <ul style="list-style-type: none"> <li>• <i>The Department of Public Works, through the Special Event Permit Office, offers complimentary recycling services to local events and festivals occurring in the City of Milwaukee. Large events such as Summerfest which do not utilize City services could provide more robust recycling collection and consider composting for increased diversion.</i></li> <li>• <i>In 2015, the State of Wisconsin passed a law prohibiting municipalities from banning or regulating plastic bags and other “auxiliary containers” such as single-use plastic containers. Single use plastic containers and bags remain a common contaminant in the recycling stream and source of litter in Milwaukee’s streets and waterways.</i></li> </ul>   |
| <p><b>Drive</b></p> <p><u><b>Action 16</b></u></p> | <p>A Regional Energy Efficiency Program<br/><i>Municipal Strategic Plans</i><br/><i>e.g.: ReFresh MKE</i><br/><i>-Improve residential and commercial energy efficiency in Milwaukee</i><br/><i>-Replace fossil fuel energy use with more clean renewable energy in City of Milwaukee facilities</i></p> <p><b>NAACP pp. 238-262</b><br/><b>Module 9: Energy Systems</b></p> <p><b>MKES</b> <i>website</i><br/><b>Solar Information &amp; Resources</b><br/><a href="#">Midwest Renewable Energy Association (MREA)</a> - Education</p> <p><a href="#">We Energies</a> - Information</p> <p><a href="#">U.S Department of Energy</a> - Renewable energy technology</p> <p><a href="#">NABCEP (North American Board of Certified Energy Practitioners)</a> - "Gold Standard" for renewable energy certification<br/><b>Site Assessments</b><br/><a href="#">NABCEP List of Certified Solar Professionals</a><br/><b>Permits</b><br/><a href="#">Milwaukee Shines Solar Electric Permitting ProcessGuide</a></p> <p>City of Milwaukee <a href="#">Permit Page</a><br/><b>Financing</b><br/><a href="#">Milwaukee Shines Solar Financing with Summit</a></p> | <ul style="list-style-type: none"> <li>• VULNERABILITY OF CRITICAL INFRASTRUCTURE</li> </ul> | <p>Improve energy efficiency and energy savings across the region.<br/><i>To Be Scaled Up</i><br/>*Region: Midwest Energy Efficiency Alliance (MEEA)<br/>#Steps for implementation will be identified with partners.</p> <p><b>RFMKE:</b><br/><i>Building Sustainability Challenges</i></p> <ul style="list-style-type: none"> <li>• <i>Many building codes, including the energy code, are established at the State level. Municipalities in Wisconsin are prohibited from passing building energy codes that are more stringent than the State of Wisconsin code.</i></li> <li>• <i>Many of Milwaukee’s older homes have large challenges. Leaking roofs or other basic structural problems often need to be addressed before adding energy efficiency and renewable energy features. Lead in older homes’ service lines, internal plumbing, and in paint has become an increasing concern for the public since the Flint, MI water crisis.</i></li> </ul> <p><i>Energy Sustainability Challenges</i></p> <ul style="list-style-type: none"> <li>• <i>Many cities are committing to ambitious renewable energy goals, in some cases aiming for 100% renewable energy. Cities like Vancouver, British Columbia have historically used large amounts of hydro power as their primary renewable energy resource. Cities in California benefit from progressive state policies, such as Community Choice Aggregation, that allow municipalities to directly procure large scale renewables. Wisconsin has a highly regulated utility electricity market, with investor-owned utilities providing the majority of energy infrastructure. Within this policy environment, municipalities have limited options for achieving renewable energy goals. Wisconsin has large historic investments in fossil fuel power plants and a reliance on natural gas to heat our homes and buildings. Because of these challenges, ECO seeks to first achieve the existing 25% renewable energy goal before establishing more aggressive targets.</i></li> <li>• <i>The City also has challenges to establishing a meaningful baseline carbon inventory in the City, such as lack of access to community wide utility energy</i></li> </ul> |

|   |  |  |   |
|---|--|--|---|
|   | <p><a href="#">Credit Union Me2 Commercial PACE Financing Installers</a><br/> <a href="#">Focus on Energy - list of installers</a></p> <p><a href="#">NABCEP (North American Board of Certified Energy Practitioners) - "Gold Standard" for renewable energy certification</a><br/> <b>Incentives</b><br/> <a href="#">Focus on Energy - Incentives</a></p> <p><a href="#">DSIREUSA (Database of State Incentives for Renewables and Efficiency) - List of incentives</a><br/> <b>Interconnection</b><br/> <a href="#">We Energies - Interconnection information</a></p> <p>SEWRPC:<br/> <a href="https://www.sewrpc.org/SEWRPCFiles/CommissionFiles/CommitteeFiles/2014/2014-10-07-minutes-att-03-ejtf.pdf">https://www.sewrpc.org/SEWRPCFiles/CommissionFiles/CommitteeFiles/2014/2014-10-07-minutes-att-03-ejtf.pdf</a></p>                   |  | <p><i>data.</i></p> <p><i>Using Public Trust Doctrine to Move Utilities to use Renewables: (see pp 212-221 on Wisconsin)</i><br/> <a href="https://repository.law.umich.edu/cgi/viewcontent.cgi?article=1046&amp;context=mjeal">https://repository.law.umich.edu/cgi/viewcontent.cgi?article=1046&amp;context=mjeal</a></p>   |
| <p style="text-align: center;"><b>Drive</b></p> <p><b>Action 16b</b></p> <p><a href="https://itdpdotorg.wpengine.com/wp-content/uploads/2014/09/A-Global-High-Shift-Scenario_V2_WEB.pdf">https://itdpdotorg.wpengine.com/wp-content/uploads/2014/09/A-Global-High-Shift-Scenario_V2_WEB.pdf</a></p> <p><b>United States:</b> Currently the world leader in urban passenger transportation CO2 emissions, with 670 megatons annually, the U.S. is projected to lower these emissions to 560 megatons</p> | <p>A Regional Transportation System</p> <p>SCR-CDR<br/> <b>3.2b Limit Sprawl and Invest in Complete Streets</b><br/> <i>In the United States, transportation emissions are rapidly growing and are expected to become the largest source of emissions in the near future. Moreover, a large amount of infrastructure within cities is dedicated to cars (i.e., parking garages, roads, street parking).</i></p> <ol style="list-style-type: none"> <li>By limiting sprawl, investing in density that is right sized for a given location and close to transit corridors (see Sierra Club's <a href="#">Urban Infill Policy</a>), and by encouraging alternative forms of transit, local communities should repurpose some land currently reserved for vehicles, such as parking lots, and turn it into affordable housing, stormwater</li> </ol> | <ul style="list-style-type: none"> <li>ABILITY TO ADAPT TO JOB MARKET CHANGES</li> <li>SOCIAL EQUITY</li> <li>DISTRIBUTION OF PUBLIC SERVICES</li> </ul> | <p><i>Improve accessibility and efficiency of mass transportation and dis incentivizing the automobile</i><br/> <i>To Be Scaled Up</i><br/> <i>*Region: SEWRPC given Teeth:</i><br/> <i>*County</i><br/> <i>*Municipal</i><br/> <i>#Lobby the state to create Regional Transportation Authorities</i><br/> <i>#Steps for implementation will be identified with partners.</i></p> <p><i>+Eight states are providing incentives for zero emitting freight trucks, transit buses and school buses; introducing electric shuttle and urban buses into transit fleets; allocating Volkswagen settlement funds toward medium- and heavy-duty vehicle electrification; and piloting innovative approaches such as vehicle-to-grid (V2G) electric school buses.</i><br/> <a href="https://ww2.arb.ca.gov/es/news/california-and-seven-states-commit-faster-transition-zero-emission-trucks-and-buses">https://ww2.arb.ca.gov/es/news/california-and-seven-states-commit-faster-transition-zero-emission-trucks-and-buses</a></p> <p><i>RFMKE: Mobility pp 24-27</i></p> <ol style="list-style-type: none"> <li><i>Mobility Sustainability Challenges</i> <ul style="list-style-type: none"> <li><i>The single-occupant automobile remains a predominant form of transportation in the Milwaukee metropolitan area. Relatively low commute times across the metropolitan area reduce the demand for public investments in transit and other means of transportation.</i></li> </ul> </li> </ol> |

|   |   |   |  |
|---|---|---|--|
| <p>by 2050 because of slower population growth, higher fuel efficiencies, and the decline in driving per person that has already started as people move back to cities. But this pace can be sharply accelerated with more sustainable transportation, dropping by half to 280 megatons, under the High Shift scenario. For the U.S. in particular, this scenario includes not only mode shifting but also considerable reductions in urban kilometers of travel per person through urban recentralization and substitution of telecommunications for travel.</p> | <p><i>retention features, green infrastructure, community spaces, or other features that will help enhance community resilience to a changing climate.</i></p> <p><i>In addition, local communities should embrace a <u>complete streets</u> approach for all existing and to-be-developed roads, thereby ensuring they are safe for all users, especially pedestrians, bicyclists, and transit riders of all ages and abilities. Complete streets should also integrate green infrastructure principles to help mitigate heat and flooding impacts associated with a changing climate.</i></p> <p>NAACP pp.396-407+<br/><b>Module 17: Transportation Systems</b></p> <p><a href="https://thecityfix.com/blog/walking-talk-can-learn-germanys-new-pedestrian-policy-framework-2-claudia-adriazola-steil-alejandroschwedhelm/">https://thecityfix.com/blog/walking-talk-can-learn-germanys-new-pedestrian-policy-framework-2-claudia-adriazola-steil-alejandroschwedhelm/</a></p> <p><a href="https://www.traffictechtoday.com/news/multimodal-systems/new-study-shows-new-mobility-services-are-only-sustainable-when-combined-with-public-transportation.html">https://www.traffictechtoday.com/news/multimodal-systems/new-study-shows-new-mobility-services-are-only-sustainable-when-combined-with-public-transportation.html</a></p> <p><i>Equity NEPA and EJ</i><br/><a href="https://vimeo.com/392754570">https://vimeo.com/392754570</a></p> <p><b>BETTER BUSES BETTER CITIES:</b><br/>Everett, a largely working-class municipality of 46,000 residents, was the first to try it, in December 2016. Starting in 2017, the Barr Foundation, a private foundation, helped staff in Cambridge, Watertown, and Arlington follow suit and helped Everett further enhance its bus lane. Somerville launched a pilot lane in 2017, and Boston ran a month-long test in spring 2018, testing out a bus lane in its Roslindale neighborhood to speed up a route that connected to the Orange Line subway. Universally, the pilots proved popular. The lanes in Boston, Arlington, Somerville, and Everett have all been made permanent. (As of June 2019,</p> | <p><b>BETTER BUSES BETTER CITIES:</b><br/>The tactical approach used in greater Boston (and, increasingly, elsewhere) can help create a friendlier politics as well. Tactical projects can begin after short outreach and data collection periods. Municipal staff in Cambridge, Watertown, and Arlington took just a few months to meet with stakeholders. In Everett, the process was even more abbreviated. “The project was the process,” said Jay Monty, Everett’s city planner. “We know that 10,000 people a day ride the bus down Broadway [where Everett put its pilot bus lane], and that it’s half the mode share during</p> | <ul style="list-style-type: none"> <li>• <i>The Milwaukee County Transit system also faces persistent fiscal challenges that create pressure to reduce services.</i></li> <li>• <i>The State of Wisconsin’s transportation budgets are also heavily skewed toward road construction in support of automobile travel. State economic development subsidies for manufacturing in exurban areas reduces connections between employers and workers.</i></li> </ul> <p><b>AIRPORT? PHASE Three Emissions:</b> <a href="https://vimeo.com/379631649">https://vimeo.com/379631649</a></p> <p><i>Despite the decline in transit service included in the FCTP, there are some recommendations from VISION 2050 that could improve the experience of riding transit in the Region without increasing the net cost of operating the transit system, making the services that remain slightly faster and more attractive to residents. Those recommendations are included in the FCTP, and are listed below. More detail on these recommendations can be found in Chapter 1 of this volume.</i></p> <ul style="list-style-type: none"> <li>• <i>&lt; Recommendation 2.6: Implement “transit- rst” designs on urban streets</i></li> <li>• <i>&lt; Recommendation 2.7: Enhance stops, stations, and park-ride facilities with state-of-the-art amenities</i></li> <li>• <i>&lt; Recommendation 2.8: Accommodate bicycles on all xed-route transit vehicles</i></li> <li>• <i>&lt; Recommendation 2.9: Implement programs to improve access to suburban employment centers</i></li> <li>• <i>&lt; Recommendation 2.10: Provide information to promote transit use</i></li> <li>• <i>&lt; Recommendation 2.12: Consider implementation of proof-of-payment on heavily-used transit services</i></li> </ul> <p>SEWPRC<br/>Workplace: <a href="https://www.sewrpc.org/SEWRPC/Transportation/Workforce-Mobility-Team.htm">https://www.sewrpc.org/SEWRPC/Transportation/Workforce-Mobility-Team.htm</a><br/><a href="https://www.sewrpc.org/SEWRPCFiles/CommissionFiles/CommitteeFiles/2015/2015-09-29-minutes.ejtf-att-03.pdf">https://www.sewrpc.org/SEWRPCFiles/CommissionFiles/CommitteeFiles/2015/2015-09-29-minutes.ejtf-att-03.pdf</a></p> <p><b>BLOG on WI and Mass Transit Issues:</b> <a href="https://usa.streetsblog.org/2019/12/19/on-wisconsin-badger-state-slowly-improving-transit/">https://usa.streetsblog.org/2019/12/19/on-wisconsin-badger-state-slowly-improving-transit/</a></p> <p><i>Encourage employers to invest in public transit and active transportation</i><br/><b>WAASL</b></p> <p><a href="http://www.busadvocates.org/articles/fares/Cranes_FFT_KEBLOWSKIarticle_v2019_12.pdf?fbclid=IwAR3qEMpz9hJepW9nanPnUFAt3_3Iha68X5OYwrBCXzcT3GD9VwIhHkJ98">http://www.busadvocates.org/articles/fares/Cranes_FFT_KEBLOWSKIarticle_v2019_12.pdf?fbclid=IwAR3qEMpz9hJepW9nanPnUFAt3_3Iha68X5OYwrBCXzcT3GD9VwIhHkJ98</a><br/><b>CUR</b></p> <p>T4America: <i>Green New Deal for Transportation</i><br/><a href="http://t4america.org/wp-content/uploads/2020/03/20.03_GND-Transit_use_v4.pdf">http://t4america.org/wp-content/uploads/2020/03/20.03_GND-Transit_use_v4.pdf</a></p> |
|---|---|---|--|



|  |   |   |  |
|--|---|---|--|
|  | <p>Cambridge and Watertown had not decided whether to make permanent their pilot, which involved both municipalities.)<br/>         Why did these work? For one, the projects done by the municipalities outside Boston had ironclad backing from local leaders. By 2017, Barr had been advocating for BRT for several years. Mary Skelton Roberts, the co-director of Barr’s climate program, and Lisa Jacobson, the mobility program officer, explained to me that the foundation had issued reports, held public events and design competitions, and even taken local officials to experience BRT projects in Mexico City.<br/>         Even after all that, the reformers working to bring bus priority to the region perceived little enthusiasm from the city of Boston. An application-based competitive process, then, allowed them to suss out which municipalities might be interested in trying something. “We said, ‘should we be looking at the coalition of the willing?’” said Skelton Roberts.<br/>         Second, Barr gave the winning municipalities enough planning, public outreach, and communications and design assistance to message the project effectively. This support gave them more ability to reach out to constituents before the pilots launched, document the success of the pilots as they happened, and launch the pilots with eye-catching designs that helped change the public narrative around buses.<br/>         P 54</p> | <p>certain times of day,” he said. “We don’t need much more than that to say that justifies taking parking and prioritizing transit.”<sup>24</sup><br/>         The “pop-ups” also immediately demonstrated benefits for thousands of people and built enthusiasm that planners used to make the case for a permanent project. Using data from the Waze traffic app, Arlington planners found that their pop-up bus lane did slow down car traffic, for 1 week; congestion returned to normal after drivers got used to the lane.<sup>25</sup> Bus travel times in the corridor got 40 percent less variable, saving riders 5 minutes on an average trip and 10 minutes on a bad trip. Ninety-five percent of riders surveyed at bus stops said the lane should be made permanent. Surveyors heard reactions like, “All the stress I normally feel about getting on a bus that is immediately clogged in congestion went away.”<br/>         A tactical approach also helps when advocacy groups have to push local governments over the finish line.<br/>         P 55</p> |  |
| <p><b>Assess</b><br/><br/><i>Action 17</i></p> | <p>The Reliability Of Critical Infrastructure By Performing A Criticality Analysis<br/><br/> <i>NAACP pp. 263-311+<br/>         Module 10: Emergency Management</i><br/><br/> <i>One definition of resilient infrastructure is “the infrastructure’s ability to continue to provide critical services efficiently following a disruptive event” (Sandia National Laboratories, 2014, p. 1). In the United States, for example, this understanding of resilient infrastructure is commonly referred to in relation to concerns</i></p>   | <ul style="list-style-type: none"> <li>• FINANCIAL CONSTRAINTS</li> <li>• CLIMATIC HAZARD</li> <li>• VULNERABILITY OF CRITICAL INFRASTRUCTURE</li> </ul>  | <p>Measure, understand and monitor the state of infrastructure.<br/> <i>Ongoing</i><br/>         *Municipalities<br/>         *Non-profit/ Business Partner<br/>         *MMSD<br/>         Utilize MMSD-developed dashboards as a template to allow municipalities to assess and visualize sewer infrastructure investment needs.<br/>         #Leverage tool developed by regional agency for municipal benefits<br/>         #Provide understanding of regional investment needs for sewer infrastructure<br/>         #Pilot first step in developing a regional approach to manage infrastructure needs</p> |

|  |  |   |   |
|--|--|---|---|
|  | <p><i>with national and “homeland security” (U.S. Department of Homeland Security, 2013). There are arguably three key principles in relation to this understanding of infrastructural resilience:</i></p> <ul style="list-style-type: none"> <li>• <i>When one element of a network fails, the total system should be protected;</i></li> <li>• <i>When the total system fails, critical individual elements of the system should be protected; and</i></li> <li>• <i>Where failure happens, it should be a “safe-failure” (meaning that failure should not result in catastrophe as may happen when a levee breaks during a flood or the single source of water for a municipality fails).</i></li> </ul> <p><i>There is growing attention to the technical capabilities required to achieve this by applying concepts of redundancy, coupling, and decoupling.</i><br/><i>UTM p69</i></p> |   |   |
| <p>Establish</p> <p><u>Action 18</u></p> | <p>A Policy Review And Response Mechanism</p> <p><i>Milwaukee region:<br/>This action is inspired by the collaborative strategy developed in “Integrated Assessment on Water Level Variability and Coastal Bluffs and Shores, Northern Milwaukee County and Southern Ozaukee, Wisconsin.”</i></p>  | <ul style="list-style-type: none"> <li>• CLIMATIC HAZARD</li> <li>• VULNERABILITY OF CRITICAL INFRASTRUCTURE</li> </ul> | <p>Allow communities and organizations to be flexible and respond to changes in policy needs, to adapt to changing social, environmental and economic conditions.</p> <p><i>Ongoing</i></p> <ul style="list-style-type: none"> <li>*Municipalities</li> <li>*Non-profit/ Business Partner</li> <li>*MMSD</li> </ul> <p>#Steps for implementation will be identified with partners.</p>  |
| <p>Increase</p> <p><u>Action 19</u></p>  | <p>Green Infrastructure In The Region</p> <p><i>Fresh Coast Resource Center is an ambitious resource center with a goal of increasing GI implementation by providing resources and support to stakeholders.<br/>www.freshcoastguardians.com<br/>Reflo: Sustainable Water Solutions<br/>Clean Wisconsin<br/>Groundworks</i></p>   | <ul style="list-style-type: none"> <li>• CLIMATIC HAZARD</li> <li>• VULNERABILITY OF CRITICAL INFRASTRUCTURE</li> </ul> | <p>Reduce the vulnerability of sewerage infrastructure while providing social, economic and environmental benefits.</p> <p><i>To Be Scaled Up</i></p> <ul style="list-style-type: none"> <li>*Region</li> <li>*Non Profits</li> <li>*MMSD</li> </ul> <p>#Communicate stormwater runoff issues and discuss the solutions<br/>#Engage the public and co-design the solution<br/>#Involve the public in implementation<br/>#Raise awareness around new neighborhood features<br/>#Identify best practices for green infrastructure, including funding sources, and substantially scale up implementation</p> |
| <p>Develop And</p>                       | <p>A Plan To Make Critical Infrastructure Around Water Systems Cyber Resistant</p>   | <ul style="list-style-type: none"> <li>• FINANCIAL CONSTRAINTS</li> <li>• CLIMATIC HAZARD</li> </ul>                    | <p>Increase the cyber resilience of water systems to reduce vulnerability.</p> <p><i>New Action</i></p>   |

|  |   |  |  |
|--|---|--|--|
| <p>Implement</p> <p><u>Action 20</u></p> | <p>(Other Systems – power, transportation, ...?)</p> <p><i>NAACP pp. 423-434</i><br/><i>Module 19: Water Resource Management</i></p> <p><i>London and Singapore have identified the same challenges related to cyber threats. Partnerships with private companies were built to protect key infrastructure related to cyber risks, especially on water management system.</i></p>   | <ul style="list-style-type: none"> <li>VULNERABILITY OF CRITICAL INFRASTRUCTURE</li> </ul>   | <p>*Municipalities<br/>*MMSD<br/>#Steps for implementation will be identified with partners.</p> <p><b>Recommendation 7.8: Address security needs related to freight transportation SEWRPC</b></p> <p>Shareweb from Shareable:<br/><a href="https://www.shareable.net/how-a-shareable-network-could-be-more-beneficial-than-5g-for-future-smart-cities/">https://www.shareable.net/how-a-shareable-network-could-be-more-beneficial-than-5g-for-future-smart-cities/</a></p> |
| <p>Design</p> <p><u>Action 21</u></p>    | <p>And implement coastal management policies and programs</p> <p><i>RFMKE: pp 36-37</i></p> <p><b>SCR-CDR .2a <u>Tools to Achieve Coastal Resilience</u></b><br/>Currently, three tools are being used to respond to SLR and chronic tidal flooding: natural infrastructure, also called “living shorelines” such as oyster reefs, seagrasses, mangrove forests, and wetlands; planned or managed retreat; and constructed barriers such as levees, seawalls, and floating structures. The Sierra Club believes that when planning adaptation responses to SLR and/or chronic tidal flooding, local governments and regional and state agencies should, as described below, first consider natural adaptation tools (such as living shorelines and tidal marsh restoration), followed by managed retreat and only if both these prove infeasible consider the application of hard-edged structures such as seawalls and levees. In all cases, the best available climate science should be used at all times.</p> <p><i>NAACP pp. 382-395</i><br/><i>Module 16: Sea Level Rise and Coastal Resilience</i></p> | <ul style="list-style-type: none"> <li>CLIMATIC HAZARD</li> <li>VULNERABILITY OF CRITICAL INFRASTRUCTURE</li> <li>DISTRIBUTION OF PUBLIC SERVICES</li> </ul> | <p><i>New Action</i></p> <p>*Municipalities<br/>*MMSD<br/>#Steps for implementation will be identified with partners.</p>  |

|                           |  |   |   |
|---------------------------|--|---|---|
|                           |  |   |   |
| <p><b>Other Plans</b></p> | <p>Sierra Club Climate Resilience, Carbon Dioxide Removal, and Geoengineering Policy-Preface<br/><i>SCR-CDR</i></p> <p>MKE<br/>Environmental Collaboration<br/>Office<br/>GREAT LAKES &amp; ST. LAWRENCE CITIES<br/>INITIATIVE</p> | <p><a href="https://docs.google.com/document/d/1ghKjPm9gSq8_CMoXbO95DTUyp2onCs-T3iGWiGV7hOQ/edit">https://docs.google.com/document/d/1ghKjPm9gSq8_CMoXbO95DTUyp2onCs-T3iGWiGV7hOQ/edit</a></p> <p><a href="https://glslcities.org/wp-content/uploads/2015/08/SMWM2014Report">https://glslcities.org/wp-content/uploads/2015/08/SMWM2014Report</a></p> | <p><i>Sustainable Municipal Water Management (SMWM) declaration, which reflects a broader approach to protecting water resources. The SMWM Framework consists of six principles</i></p> |

|  |   |  |  |
|--|---|--|--|
|  | <p>2014 SUSTAINABLE MUNICIPAL WATER MANAGEMENT PUBLIC EVALUATION REPORT<br/><b>MMSD SUS</b></p> <p>SeWeR Sustainable Water Reclamation 2012<br/><b>SeWeR</b></p> <p>CITY OF MILWAUKEE<br/>ALL HAZARDS MITIGATION PLAN UPDATE<br/>PRELIMINARY DRAFT August 2019<br/><b>MKE HAZ</b></p> <p>MMSD Urban Biodiversity Plan<br/><b>MMSD Bio</b></p> <p>ReFresh Milwaukee<br/><b>RFMKE</b></p> | <p><a href="#">Milwaukee.pdf</a></p> <p><a href="https://www.mmsd.com/application/files/9314/8416/1452/Sustainability_Plan.pdf">https://www.mmsd.com/application/files/9314/8416/1452/Sustainability_Plan.pdf</a></p> <p><a href="https://www.sewrpc.org/SEWRPCFiles/CommunityAssistance/CityMilwaukeeHazardMitigation/CityofMilwaukeeHMP_August2019-RevisedDraftforWEM00249458xC212E.PDF">https://www.sewrpc.org/SEWRPCFiles/CommunityAssistance/CityMilwaukeeHazardMitigation/CityofMilwaukeeHMP_August2019-RevisedDraftforWEM00249458xC212E.PDF</a></p> <p><a href="https://www.freshcoastguardians.com/resources/our-plans">https://www.freshcoastguardians.com/resources/our-plans</a></p> <p><a href="https://city.milwaukee.gov/ImageLibrary/Groups/cityGreenTeam/documents/2018/ReFresh2018ProgressReport.pdf">https://city.milwaukee.gov/ImageLibrary/Groups/cityGreenTeam/documents/2018/ReFresh2018ProgressReport.pdf</a></p> | <p><i>and 21 milestones to work towards. Indicators to measure progress have also been developed. Additionally, the Sustainable Municipal Water Management: Measuring Progress and Reporting Publicly was created as a guide to encourage members to measure and publicly report their progress towards implementation of sustainable municipal water trends and milestones. Milwaukee's 2014 Sustainable Municipal Water Management Public Evaluation Report (SPER) is the result of this effort.</i></p> <p><i>This plan is primarily about our future, but no look to the future is complete without first looking back and taking stock of where we are today. Chapters 1 and 2 are dedicated to that end, summarizing where we've come from and our foundations forward. Chapters 3 through 10 provide a window to our shared future. These chapters explain why we care about each topic, ways we might move forward to continue to meet challenges, and goals we might set in doing so. Chapter 11 provides a framework for the rewarding work to come.p7</i></p> <p><i>The City of Milwaukee all hazard mitigation plan update, which revises the City's initial 2005 hazard mitigation plan, sets forth the most appropriate, feasible, and effective hazard mitigation strategy for the City of Milwaukee over the period 2019 through 2024. The Federal Emergency Management Agency (FEMA) requires that the plan be reviewed and updated every five years. The updated plan, which was prepared by the staffs of the City of Milwaukee Department of Public Works and the Southeastern Wisconsin Regional Planning Commission (SEWRPC), is documented in SEWRPC Community Assistance Planning Report No. 282 (3rd edition), City of Milwaukee All Hazard Mitigation Plan Update.</i></p> <p><i>The Milwaukee Metropolitan Sewerage District (MMSD), with the support of local stakeholders, wrote this plan to help protect and restore native biodiversity within MMSD's planning area through the application of green infrastructure (GI). The term GI as used in this document refers to localized management approaches and technologies that infiltrate, evapotranspire, capture, and reuse stormwater to maintain or restore natural hydrology. While GI can also refer to landscape scale components, such as forests, floodplains, and wetlands, that help maintain the natural water cycle, the focus of this report is on the potential biodiversity contributions of parcel- and street-level stormwater interventions. The implementation of such localized GI provides a wide range of triple-bottom-line (TBL) framework benefits as documented in several other studies (e.g., MMSD 2012, Wallace 2012, USEPA 2013, MMSD 2013):</i></p> <p><i>ReFresh Milwaukee provides a vision for community sustainability over the next 10 years with wide-ranging goals and targets to be met.</i></p> |
|--|---|--|--|

|  |  |  |   |
|--|--|--|---|
|  | <p>Milwaukee Shines:<br/><b>MKES</b></p> <p>Water Centric City<br/><b>MKEWCC</b></p> <p>Home Grown<br/><b>MKEHG</b></p> <p>Me2 Milwaukee Energy Efficiency<br/><b>MKEMe2</b></p> <p>PACE Milwaukee<br/><b>MKEPACE</b></p> <p>MKE Better Buildings Challenge<br/><b>MKEBBC</b></p> <p><i>Milwaukee Water Commons Branch Out:</i><br/><b>MWC BO</b></p> <p><i>South Eastern Wisconsin Regional Planning Commission</i></p> | <p><a href="https://city.milwaukee.gov/MilwaukeeShines#.XfICGWYVSu5">https://city.milwaukee.gov/MilwaukeeShines#.XfICGWYVSu5</a></p> <p><a href="https://city.milwaukee.gov/WCC">https://city.milwaukee.gov/WCC</a></p> <p><a href="https://city.milwaukee.gov/homegrownmilwaukee.com#.XfIF1GYVSu5">https://city.milwaukee.gov/homegrownmilwaukee.com#.XfIF1GYVSu5</a></p> <p><a href="https://city.milwaukee.gov/Me2#.XfIGIWYVSu5">https://city.milwaukee.gov/Me2#.XfIGIWYVSu5</a></p> <p><a href="https://city.milwaukee.gov/bbc/services/PACE-Financing">https://city.milwaukee.gov/bbc/services/PACE-Financing</a></p> <p><a href="https://city.milwaukee.gov/bbc">https://city.milwaukee.gov/bbc</a></p> <p><a href="https://www.milwaukeewatercommons.org/initiative-water-quality">https://www.milwaukeewatercommons.org/initiative-water-quality</a></p> <p><a href="https://www.sewrpc.org/SEWRPC.htm">https://www.sewrpc.org/SEWRPC.htm</a></p> <p><a href="https://www.sewrpc.org/SEWRPCFiles/Publi">https://www.sewrpc.org/SEWRPCFiles/Publi</a></p> | <p><i>Milwaukee Shines is Milwaukee's solar energy program. Milwaukee Shines provides information for home and business owners, resources for solar industry professionals, runs solar group buy programs in the City and partners with Summit Credit Union to offer solar loans up to \$20,000.</i></p> <p><i>These seven principles define what it means to be a Water Centric City.<br/>*Water Leadership *Arts Culture and Education *Water technology *Green Infrastructure *Applied Water Research *Fishable Swimmable Water<br/>We encourage cities to view all Water Centric City principles through an equity lens.</i></p> <p><i>HOME GR/OWN transforms neighborhoods by converting vacant lots into pocket parks, orchards, and gardens that create jobs, revitalize neighborhoods and increase access to healthy, local food, promoting neighborhood cohesion and placemaking.</i></p> <p><i>Me<sup>2</sup> provides affordable financing up to \$15,000 for energy saving improvements like new insulation, furnaces, boilers, hot water heaters, air conditioners, and now, windows! With Me<sup>2</sup> financing through our partner, Summit Credit Union, you can redirect some of the money you spend on high energy bills into home improvements that will keep you and your family comfortable year round.</i></p> <p><i>Property Assessed Clean Energy (PACE) financing helps commercial property owners affordably finance building upgrades like heating and cooling systems, lighting, controls, renewable energy and water efficiency upgrades. Payments are collected through a voluntary municipal special charge that is paid back through the property tax system and is attached to the property, not the owner.</i></p> <p><i>Services</i><br/><a href="#"><i>Benchmarking</i></a><br/><a href="#"><i>Energy Assessments</i></a><br/><a href="#"><i>PACE Financing</i></a><br/><a href="#"><i>Incentives</i></a><br/><a href="#"><i>O&amp;M Support</i></a><br/><a href="#"><i>Clean Technology</i></a></p> <p><i>What started as recognizing a shared goal around improving water quality fostered the creation of the Branch Out Milwaukee Campaign: a program that has developed a collective action tree planting and maintenance program aimed at equitably growing Milwaukee's tree canopy to maximize the environmental and public benefits of our City's trees.</i></p> <p><i>(For general description see first page under MMSD as this plan is regional in nature and "contains" all the others)</i></p> |
|--|--|--|---|

|   |   |   |
|---|---|---|
| <p><i>SEWRPC</i></p> <p><i>Kansas City Playbook</i></p> <p>Equitable Clean Energy Guidebook<br/><i>CADMUS</i></p> <p>Our Communities, Our Power: Advancing Resistance and Resilience in Climate Change Adaptation<br/><i>NAACP</i></p> <p>USDA Food Security Guide<br/><i>USDA</i></p> <p>Climate Fast Forward<br/>WI Acad of Sci Art and L<br/><i>WAASL</i></p> <p><i>Montgomery County</i><br/><i>MGC</i></p> | <p><a href="#">cations/AnnualReport/2018_annual_report.pdf</a></p> <p><a href="https://www.marc.org/Environment/Climate-Action/pdf/Climate_Action_Playbook.aspx">https://www.marc.org/Environment/Climate-Action/pdf/Climate_Action_Playbook.aspx</a></p> <p><a href="https://cadmusgroup.com/wp-content/uploads/2018/09/Cadmus-USDN-Equitable-Clean-Energy-Guidebook.pdf?utm_referrer=https%3A%2F%2Fcadmusgroup.com%2Fpapers-reports%2Fa-guidebook-on-equitable-clean-energy-program-design-for-local-governments-and-partners%2F">https://cadmusgroup.com/wp-content/uploads/2018/09/Cadmus-USDN-Equitable-Clean-Energy-Guidebook.pdf?utm_referrer=https%3A%2F%2Fcadmusgroup.com%2Fpapers-reports%2Fa-guidebook-on-equitable-clean-energy-program-design-for-local-governments-and-partners%2F</a></p> <p><a href="https://live-naacp-site.pantheonsite.io/wp-content/uploads/2019/04/Our-Communities-Our-Power-TOOLKIT-FINAL.pdf">https://live-naacp-site.pantheonsite.io/wp-content/uploads/2019/04/Our-Communities-Our-Power-TOOLKIT-FINAL.pdf</a></p> <p><a href="https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/survey-tools/#household">https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/survey-tools/#household</a></p> <p><a href="https://www.wisconsinacademy.org/sites/wisconsinacademy.org/files/CFFConferenceReport_Final_Jan2020.pdf">https://www.wisconsinacademy.org/sites/wisconsinacademy.org/files/CFFConferenceReport_Final_Jan2020.pdf</a></p> <p><a href="https://scruzclimate.files.wordpress.com/2018/07/climatemobilizationreport-1.pdf">https://scruzclimate.files.wordpress.com/2018/07/climatemobilizationreport-1.pdf</a></p> <p><a href="http://www.resalliance.org/3871.php">http://www.resalliance.org/3871.php</a></p> | <p><i>(Recommended by Bruce Wiggins, former City Planner in Kansas City)</i></p> <p><i>The growing wealth disparity between low- and moderate-income (LMI) households and other underserved groups and those with greater affluence is reflected through the disproportionate uptake of clean technologies by higher-income households in U.S. and Canadian municipalities. These households lack access to clean energy technologies because of a variety of barriers, including affordability, high up-front costs, access to credit, split incentives between landlords and tenants, outreach and awareness, and other programmatic barriers. These trends raise concerns of a growing “electrical divide” where differing abilities to adopt new clean energy technologies could further disadvantage communities.1</i></p> <p><i>The Beloved Community is a vision for our future where all people share equally in the wealth and bounty of the earth, where we protect its abundance, diversity and beauty for future generations. In this vision of liberation, racism, exploitation, and domination are replaced by democracy, cooperation, interdependence, and love. To get there, we pursue transformative, systems-change solutions. What do we mean by this? The root causes of the problems our communities face—like climate change, racism, and economic inequality—are all deeply connected. Since the problems are connected, so are the solutions.</i></p> <p><b>ONE TOOL: U.S. Household Food Security Survey Module</b><br/><i>(18-items) Three-stage design with screeners. Screening keeps respondent burden to the minimum needed to get reliable data. Most households in a general population survey are asked only three questions (five if there are children in the household). The questionnaire has been modified slightly from that in the Guide, and the questions have been re-ordered to group the child-referenced questions after the adult-referenced questions; download it in the format that works</i></p> <p><i>First climate Emergency Declaration/ Work Group Report/ Drawdown base</i></p> <p><i>Key Concepts</i></p> |
|---|---|---|



|   |  |   |
|---|--|---|
| <p>Resilience Alliance</p> <p>Cosmopolis: Centre for Urban Research<br/><b>CUR</b></p> <p><b>Turku Circularity Report</b><br/><b>TCR</b></p> <p><b>WI Clean Energy Toolkit</b></p> <p><b>Agroecology</b><br/><b>AE</b></p> <p><b>US Army Corps of Engineers Resilience Initiative Roadmap 2016</b><br/><b>USACE R</b></p> | <p>(see 16 b transit)</p> <p><a href="https://e-lib.iclei.org/publications/Turku-report-web.pdf">https://e-lib.iclei.org/publications/Turku-report-web.pdf</a></p> <p><a href="https://9aafd4f1-d7cd-43c8-934c-09ac33f87b88.filesusr.com/ugd/fe3757_46d94580584f414abc43a8e531047cbb.pdf">https://9aafd4f1-d7cd-43c8-934c-09ac33f87b88.filesusr.com/ugd/fe3757_46d94580584f414abc43a8e531047cbb.pdf</a></p> <p><a href="https://www.coventry.ac.uk/globalassets/media/global/08-new-research-section/signposts/everyday-experts-complete-new.pdf">https://www.coventry.ac.uk/globalassets/media/global/08-new-research-section/signposts/everyday-experts-complete-new.pdf</a></p> <p><a href="https://www.publications.usace.army.mil/Portals/76/Publications/EngineerPamphlets/EP1100-1-2.pdf?ver=2017-11-02-082317-943">https://www.publications.usace.army.mil/Portals/76/Publications/EngineerPamphlets/EP1100-1-2.pdf?ver=2017-11-02-082317-943</a></p> <p><a href="https://www.sandia.gov/cities/index.html">https://www.sandia.gov/cities/index.html</a></p> | <p><u><a href="#">/ Social-ecological Systems / Transformation / Resilience / Panarchy / Adaptive Management / Adaptive Cycle / Adaptive Capacity /</a></u></p> <p><i>Free Public Transit report</i></p> <p><i>This publication is a product of the “Circular Turku: Regional collaboration for resource wisdom” (2019-2021) project, which aims to design a regional roadmap to operationalize circularity in the Turku region with the support of local stakeholders and ICLEI - Local Governments for Sustainability. The report captures the results and learnings of the inception phase of the project and the existing endeavors and good practices of Turku.</i></p> <p><i>As support grows for clean energy, there is a need to help communities of various sizes with differing resources develop a plan for their transition to renewable energy. This toolkit offers ideas and resources to help Wisconsin communities begin this transition.</i></p> <p><i>The collaborative project that has led to Everyday Experts has come together during perhaps the greatest global political upheaval since the Second World War. Food and water insecurity, mass human migrations and violent conflict, often involving struggles for control over land and other resources, are affecting more people than any time in history. Our collective aim, as editors and contributors, has been to support efforts that allow all people’s participation in the creation and democratic control of change. We do this by sharing stories of people who we call everyday experts. These are people whose expertise comes from their life experience rather than from professional training. Our book explores how these experts-by-experience can work together with professionals to transform our damaged food system towards health and agroecological goals on the one hand, and a fair distribution of power, risk and resources on the other. We have been brought together by a common desire to reflect critically on how people’s knowledge and wisdom can be harnessed through action, participatory research and critical learning in support of movements for greater justice in the food system.</i></p> <p><i><b>RESILIENCE</b> has developed at national, state, regional, and local levels as the concept to convey a holistic approach to addressing threats and uncertainty from acute hazards such as more frequent and/or stronger natural disasters, man-made threats, changing conditions from population shifts and climate change. Resilience represents a comprehensive, systems-based, lifecycle approach to both acute hazards and changes over time, and the concept of resilience is used to convey a broad-based, collaborative approach to finding creative solutions to such challenges. Executive Order (EO) 13653, “Preparing the United States for the Impacts of Climate Change” (November 2013), describes resilience as “the ability to anticipate, prepare for, and adapt to changing conditions and withstand, respond to, and recover rapidly from disruptions.”</i></p> <p><i>Energy systems are at the heart of the web of interconnected infrastructures that support</i></p> |
|---|--|---|

|  |   |   |   |
|--|---|---|---|
|  | <p>100 Resilient Cities</p> <p>Drawdown:<br/><b>Dd</b></p> <p>Encyclopedia of Milwaukee<br/><b>EM</b></p> <p>T4America: Green New Deal for Transportation<br/><b>T4</b></p> <p>Urban Thinking for Municipalities<br/><b>UTM</b></p> | <p><a href="https://drawdown.org">https://drawdown.org</a></p> <p><a href="https://emke.uwm.edu/about/">https://emke.uwm.edu/about/</a></p> <p><a href="http://t4america.org/wp-content/uploads/2020/03/20.03_GND-Transit_use_v4.pdf">http://t4america.org/wp-content/uploads/2020/03/20.03_GND-Transit_use_v4.pdf</a></p> <p><a href="https://www.academia.edu/10862964/Urban_Resilience_Thinking_for_Municipalities?email_work_card=view-paper">https://www.academia.edu/10862964/Urban_Resilience_Thinking_for_Municipalities?email_work_card=view-paper</a></p> | <p><i>civilization as we know it. Sandia National Laboratories' Urban and Community Resilience Initiative works directly with cities, electric utilities, and other stakeholders to develop strategies for improving the resilience of local energy systems to support critical lifeline functions such as water, food, and shelter following emergencies. Through this initiative, Sandia's capabilities in modeling, designing, optimizing, and analyzing infrastructures and social systems converge toward helping planners suggest and evaluate resilience-enabling technologies such as <a href="#">advanced microgrids</a>, energy storage, and transportation electrification at a city-wide or community-wide scale.</i></p> <p><i>Our mission is to help the world reach "Drawdown"—the point in the future when levels of greenhouse gases in the atmosphere stop climbing and start to steadily decline, thereby stopping catastrophic climate change — as quickly, safely, and equitably as possible.</i></p> <p><i>The Encyclopedia of Milwaukee project aims to provide comprehensive coverage of the history of Milwaukee. With a projected 740 entries, hundreds of illustrations, historical and contemporary maps, bibliographic materials, and the opportunity to interact with readers, the EMKE will be a first stop for researchers ranging from students to journalists to scholars and the general public.</i></p> <p><b>Federal transportation policy is broken. American communities are suffering as a result.</b><br/><i>The U.S. transportation system is both an enormous source of carbon emissions and a major contributor to inequality. Access to safe, affordable, and reliable transportation is a fundamental right, yet most Americans are denied this right because of misguided federal transportation policies and funding priorities.</i></p> <p><i>This document was prepared as a contribution to the Department of Science and Technology's (DST's) Grand Challenge on Global Change and as a complement to flagship initiatives such as the South African Risk and Vulnerability Atlas project (Archer, et al., 2010). The Global Change Grand Challenge is aimed at "supporting knowledge generation and technological innovation that will enable South Africa, Africa, and the world, to respond to global environmental change, including climate change" (Archer, et al., 2010, p. ii).</i></p> |
|--|---|---|---|