

Work Plan

Climate Friendly Land Use: Regulations and Processes

CPRG Implementation Grants General Competition – April 2024

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Section 1: Overall Project Summary and Approach

Introduction

Western Connecticut Council of Governments (WestCOG), in a coalition with seven of Connecticut's councils of governments (COG), is seeking funding through the U.S. Environmental Protection Agency's (US EPA) Climate Pollution Reduction Grant Program (CPRG) to develop and implement a suite of Climate Friendly Land Use Regulation and Processes at the local level across CT.

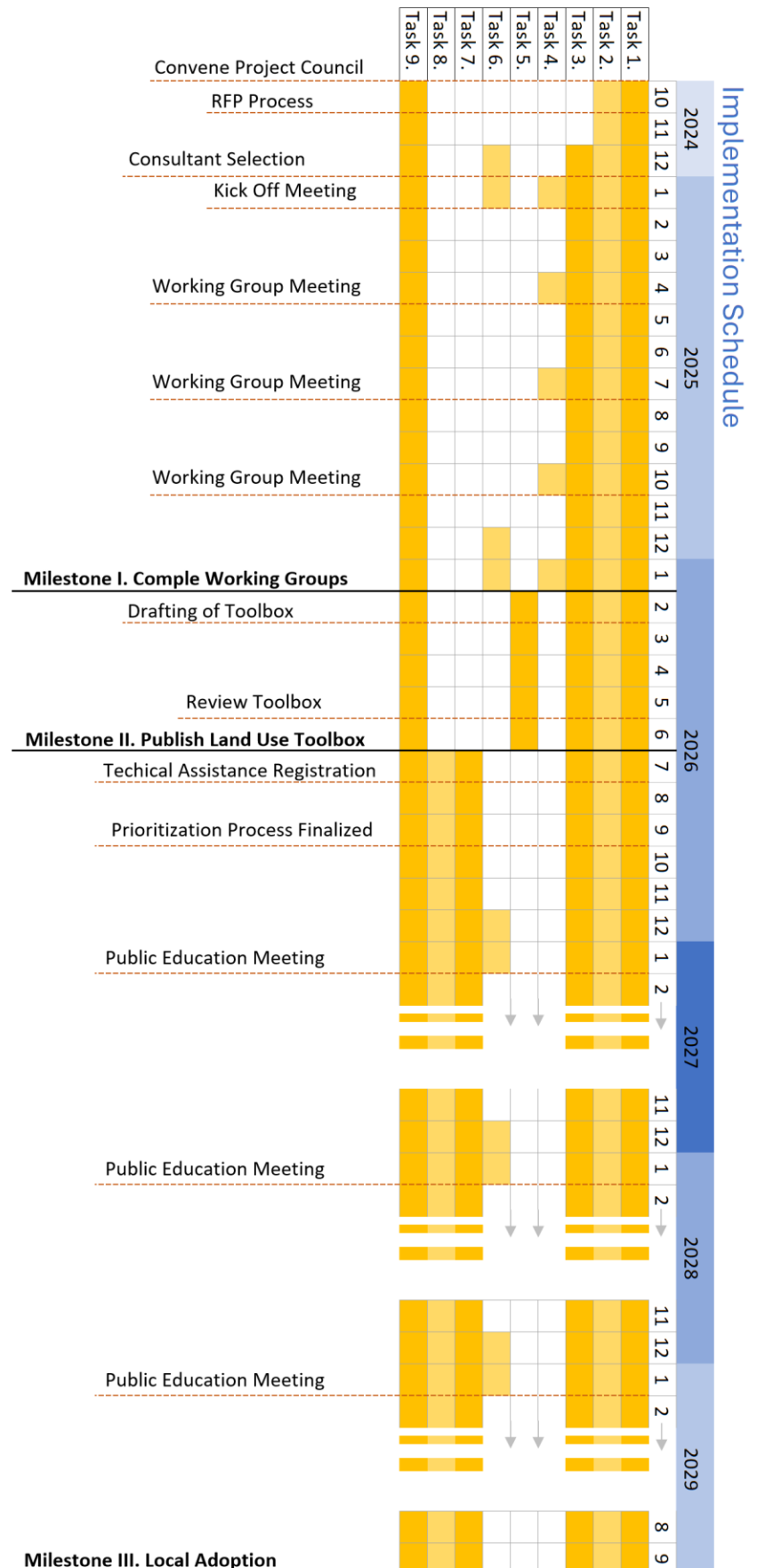
These services will be provided at no cost to interested municipalities, and all municipalities across Connecticut enjoy the benefits of the first two milestones (detailed below). The third milestone provides technical assistance, which will be provided to 50 municipalities in CT. The selection of these municipalities will be performed using a prioritization process that accounts for LIDACs and municipal support.

Milestones, Tasks, and Major Features

Milestones reflect notable accomplishments to track progress of the proposed measure. Climate Friendly Land Use: Regulations and Processes has three notable milestones: 1) Working Groups have convened to capture municipal climate friendly land use best practices; 2) Publication of the Climate Friendly Land Use Toolbox; 3) Local Adoption of Climate Friendly Land Use Regulations and Processes. Each milestone along with its associated funding tasks are detailed below.

Milestone I. Working Groups. Hosting of the Connecticut Climate Friendly Land Use Working Groups will take advantage of peer learning by meeting as a group to address shared local issues, including general development of regulations and processes.

- Task 1. Consultant Coordination



Major Features

Initial research and publications have prepared a suite of climate friendly land use regulations and processes to work with municipalities to adopt. The breadth of topics will allow municipalities to be aligned in their land use policy to meet the implementation of climate friendly practices, while the one-on-one technical assistance will allow the practices to be adapted to the unique, hyperlocal needs of each community. Below is a summary of the major features associated with the Climate Friendly Land Use Measure:

Subdivision Regulations to Maximize Solar Potential. Subdivision regulations to orient new streets and lots to maximize solar potential (both for passive and active solar).

- Solar/farming subdivisions with agriculture integral to development-cuts transport BTUs.
- Redevelopment of underutilized built properties
- Cluster subdivision regulations that integrate green space and forest canopy into design
- Community gardens in subdivisions and planned unit developments.

Zoning regulations to maximize heat efficiency and photovoltaic generation.

- Solar-oriented roofs (south-facing, pitched toward sun).
- Simple roof geometry and height limits to accommodate photovoltaic arrays.
- Energy efficient windows concentrated on the south face, with limited fenestration on north face.
- Roof overhangs to provide summer shade.
- Deciduous trees for winter windbreaks and summer shade.
- Garages, sheds and earth sheltered wall on the north face to insulate.
- Building designs for earth sheltering to insulate.
- Ground and canopy mount solar systems.
- Incentives for development on south facing slopes.
- Disincentives for development on north facing slopes.

Zoning regulations for distributed energy generation.

- Solar permitted in front, side, and rear yards.
- Setback pooling or flexibility for ground-mounted systems.
- Height limit waivers for roof-mounted solar.
- Historic district compatible solar arrays.
- Protection of solar access.
- Cooperative ownership of solar photovoltaic systems in new development.
- Micro-grid developments to ensure uninterrupted locally generated renewable power.

Zoning to support building and vehicle electrification.

- Heat pumps permitted in front, side, and rear yards.
- EV chargers permitted in front, side, and rear yards.
- Historic district compatible heat pumps and EV chargers.
- EV charging station requirements in commercial/industrial zones.

Zoning for zero- and low-carbon housing.

- Letting of rooms and accessory units in existing single-family homes.
- Mixed use development with housing on second floor of commercial buildings.
- Reuse of garages, outbuildings, and underutilized principal buildings for accessory units.
- Expanded use of two/three family housing consistent with single family appearance.
- Reuse of underutilized commercial properties
- High-density housing in transit-oriented developments.
- Hot House based greenhouse agriculture in industrial zones.
- Incentives for green roofs and blue roofs.

Zoning and ordinances to promote carbon sequestration.

- Impervious surface limits.
- Lot disturbance restrictions.
- Regulation of tree cutting.
- Low-carbon agriculture and silviculture.
- Financial incentives for tree planting and forest protection.
- Expanded use of riparian forest protections.
- Native planting incentives or requirements.

Zoning to promote transportation alternatives.

- Dedicate designated areas in right of way for bus shelters, para-transit use.
- Require or incentivize sidewalks with certain commercial or mixed-use developments.
- Require or incentivize bicycle racks, secure bicycle storage, and locker rooms depending on development type.
- Require the principal entrance to be located on the street/sidewalk side of the building, rather than to a parking lot.

Design guidelines for historic and village districts.

- Zero- and low-carbon housing.
- High carbon sequestration landscaping.
- Street trees to shade energy inefficient historic buildings to reduce air conditioning use.
- Require or incentivize sidewalks.
- Promote a mix of uses in walking distance.

Engineering standards for roads to minimize the urban heat island effect and embodied carbon and to maximize carbon sequestration.

- Reduced hardscape.
- Use of low-carbon materials.
- Replace impervious surfaces with permeable/pervious pavement where possible.
- Inclusion/preservation of native street trees and vegetated buffers.
- Municipal Pre-wiring for curbside EV charging.
- Pedestrian and transit facility standards.
- Bicycle racks/storage.
- Dedicated bicycle lanes in road rights of way.

- Road design standards that rely on greater use of recycled materials.

Streamline review and approval processes.

- Pre-approval/automated validation/expedited approval for solar power installations, heat pumps, EV charging stations.
- Coordinated reviews of all no/low-carbon applications.
- Property tax reductions or zoning incentives for use of solar and energy efficient development.
- Property tax breaks for achieving “Green Area” goals.

Why Climate Friendly Land Use

Climate Friendly Land Use is well suited for the CPRG program by providing an enduring, foundational, and cost-effective set of carbon reducing actions through land use. It benefits from the cost efficiency naturally realized in preventative efforts (See Section 2 for details on the GHG Reductions).

Connecticut is famously a Home-Rule state, with each of its 169 municipalities taking pride in strong, local control. For this reason, it is challenging to implement a one-size-fits-all climate solution for zoning regulations across the state. This project is unique in that it will furnish municipalities with expert consultants who will modify draft regulations and policies to meet the specific needs of each community. This will greatly increase the likelihood of adoption and implementation.

Additionally, this measure is aligned with CPRG goals which are outlined below.

Foundation for the Future

CPRG Goal 1. Implement ambitious measures that would achieve significant cumulative GHG reductions by 2030 and beyond.

Local governments may not produce many greenhouse gas emissions directly, but through their authority for land use, can influence emission rates in housing, business, industry, agriculture, and related sectors such as transportation. Small, low-cost changes to local regulations and processes, multiplied across thousands and millions of development applications, can produce large cumulative decreases in emissions intensity and overall emissions.

The measure will harness the power of local governments to effect broad and lasting change through their land use authority. This will be achieved by giving intensive technical assistance to municipalities to develop, adopt, and implement regulations and processes that yield low-emissions outcomes.

Previous efforts at sustainable land use have fallen short by only providing ‘model’ language without the specificity to local conditions or the support needed for local adoption and implementation. This project will close this strategy-execution gap by providing the resources to see regulatory and process reforms the entire way from concept to completion, and from idea to impact, on an intensive, individual basis for municipalities in the project area.

Benefits LIDAC Communities

CPRG Goal 2. Pursue measures that would achieve substantial community benefits, particularly in low-income and disadvantaged communities.

The Climate Friendly Land Use Regulations and Processes is designed to target communities with LIDAC census tracts so they may receive a suite of direct benefits and co-benefits through the implementation of this measure. See Section 4: Low-Income and Disadvantaged Communities for details on the direct benefits, and indirect benefits for LIDAC populations.

Builds On Existing Work

CPRG Goal 3. Complement other funding sources to maximize these GHG reductions and community benefits.

Existing efforts by WestCOG in land use regulations and processes served as an impetus to develop the Climate-Friendly Land Use measure. While funding is not available, complimenting resources are available to provide a strong foundation for the launch of this project. Each identified complimenting project has been outlined below:

Decarbonizing Land Development Practicesⁱ. The report provides a blueprint for developing solar-conscious land use practices to reduce dependence on fossil fuels including a wide range of photovoltaic deployment strategies that fall within the authority of local governments through zoning and subdivision regulations. Supporting residential solar installation is a key component of the Climate Friendly Land Use Measure.

Electric Vehicle Zoning. WestCOG is working with Live Green CT to help develop model language to assist the deployment of EV infrastructure and promote EV adoption. Electrical Vehicle Zoning regulations could easily be adapted and built into the Climate Friendly Land Use Measure.

Flooding in Connecticut: A Status Report on Municipal Flood Prevention Standardsⁱⁱ. A WestCOG publication that summarizes the findings of a review of all municipal flood prevention regulations in Connecticut to identify best practices and areas where municipal regulations have failed to keep pace with rapidly changing meteorological and climate change conditions associated with flood hazards. Resilience land use regulation can readily be added to the suite of climate friendly land use regulation to work with communities for adoption providing additional resilience co-benefits for LIDAC communities.

Riparian Corridor Protections Zoning Strategiesⁱⁱⁱ. The report presents the history of past attempts to protect riparian corridors, the role riparian corridors play in reducing surface water pollution and hypoxia in Long Island Sound, reviews the range of riparian corridor protection strategies that have been adopted statewide, and provides model regulations for municipalities. Existing model regulations for riparian corridors can provide opportunities to preserve and expand canopy cover, a carbon sink, while also providing cleaner water and air for municipalities employing these regulations. This suite of strategies can readily be considered in the climate friendly land use strategy.

Policy on Resilient Forests for Connecticut's Future^{iv}. This report provides recommended actions to, in the face of climate change, comprehensively avoid forest conversion; protect healthy, intact, and resilient forests; offset planned or permitted forest losses; provide incentives for stewardship, forest retention, and forest resiliency; and protect urban forests, build more parks, and plant more trees.

Governor's Council on Climate Change (GC3) – Municipal Zoning^v. Many of the COG executive Directors participated in the GC3 zoning working group and have had an in depth review of zoning opportunities and challenges to address climate change.

Scalable

CPRG Goal 4. Pursue innovative policies and programs that are replicable and can be “scaled up” across multiple jurisdictions.

Note that policy diffusion is common among municipalities in Connecticut – that is, municipalities regularly copy or adapt from their neighbors and peers. It is expected that the reforms adopted by municipalities receiving technical assistance for local adoption will ‘seed’ future regulatory and process reform elsewhere in Connecticut beyond the end of the project period. Based on historical experience, each regulatory or process innovation a municipality in Connecticut undertakes inspires at least one (and often several) adoption and implementation in other municipalities, so it is expected that the project will result in the majority of municipalities in Connecticut adopting and implementing climate-friendly and low-carbon regulations and processes. Additionally, given the similarities of new England municipalities, the toolbox with its model language and case studies would make this a ready and replicable resource for New England Communities as well.

Consistent with Coalition PCAPS

Coalition members include MetroCOG, CRCOG, NVCOG, NHCOC, SCRCOG, RiverCOG, SECCOG and have consistent Land Use efforts represented in their respective MSA PCAPS. The respective plans and their associated measures are identified below.

Hartford-East Hartford-Middletown PCAP.^{vi} Measure T5. Page 25. Develop and Implement Roundabout Projects Across the Region with a focus on LIDACs.

SW CT Climate Action Plan: Bridgeport-Stamford-Norwalk MSA PCAP.^{vii} Measure 6a. Page 121 Climate Friendly Land Use.

IMPACT2045: New Haven-Milford MSA PCAP.^{viii} Measure T.7. Page 50. Reduce spatial misalignment through changes in land-use. Measure T.9. Page 52. Increase the overall Electric Vehicle adoption and create infrastructure to support this. E.8 Page 57. Consider adopting clean energy zoning ordinances that would require new and/or existing buildings to meet certain clean energy milestones through the use of onsite renewables or clean energy purchasing. B.6 Page 69. Support climate friendly land use.

Funding Need

Climate Friendly Land Use Regulations, while fundamental for the continued reduction of climate pollution, are not readily supported through funding programs, despite being low cost, actionable, and enduring solution. Repeatedly land use strategies are outlined in most planning documents but due to funding constraints they are not frequently implemented. Below is a review of funding programs and departments regularly tracked by WestCOG for potential funding opportunities.

HUD. Currently does not offer climate focused land use regulations funds. The Green and Resilient Retrofit Program (GRRP) meets the climate emphasis but focuses on retrofits and technology and not on land use regulations.

DOE. Provides funding for associated effort through Resilient and Efficient Codes Program and the Zero Building Energy Codes Funding Program. Building codes are authorized at the state level in Connecticut and they do not focus on land use regulations, which is implementable at the local level in CT.

DOE's SOLVE IT Funding Program. Is intended to build up new project concepts over a three-phase funding arrangement and at the local scale. This funding source does not adequately meet the scale and timeliness of the Climate Friendly Land Use measure.

State of CT Dept. of Agriculture. There is funding for climate friendly land use pertained to agriculture, but this falls short of this measure's scale of implementation.

State of CT Dept. of Energy and Environment Protection (DEEP). Has not historically funded projects for Climate Friendly Land Use.

Assumptions and Risk on GHG Reductions

The following assumptions for this measure have been identified:

1. Development patterns will maintain their existing rates.
2. Adoption of climate friendly land use regulations will progress steadily under this measure.
3. Municipalities will engage with COGs on this measure.
4. Adopted land use policies will be enforced.
5. Municipalities will mimic the land use policies of their neighbors.
6. Residents will utilize incentives to employ climate pollution reducing technologies (such as solar panel installations).
7. Improved processes will enable residents to climate friendly action.
8. The cost of electricity in Connecticut will remain (the highest in Continental USA).

Overall risk to implementation schedule is considered minimal. Previous efforts by WestCOG in Land Use Adoption have all been completed on the project schedule. Additionally, the planning professionals have been polled regarding their interest in utilizing this measure and have expressed resounding interest in the toolbox and technical services. Building permit data has not shown any form of declining trends, so the impact of avoided emissions looks promising. Lastly, regarding public interest to employ climate friendly technologies, is ultimately not an issue for this measure's timely implementation. While it would cause reduced observed emissions, the State and its municipalities would have the land positioned in a way where they can readily apply solutions (since new rooftops would be angled correctly for solar for example). So, while each assumption poses a certain amount of risk, WestCOG is confident in the timely and effective implementation of this measure.

Roles and Responsibilities

Lead Agency Role. WestCOG would serve as the lead agency for the coalition and would be tasked in the administration and reporting for the grant award as well as project management. Additionally, WestCOG would perform the outreach and supporting duties alongside coalition members. Coalition member responsibilities are outlined below.

Coalition Member Role. MetroCOG, CRCOG, NVCOG, NHCOG, SCRCOG, SCCOG, and RiverCOG would serve as coalition members to support the implementation of this measure. Duties of coalition members include:

- Serve as Project committee members. Members would provide guidance on the planning process, review deliverables, selection of technical assistance vendors, and define municipal prioritization process to receive technical assistance.
- Working Groups Outreach. To assist in connecting municipalities to their respective working group meetings.

- **Technical Assistance Coordination.** Provide support where needed during the technical assistance process between contracted technical staff and municipalities.

The collaboration of the coalition members is integral as these members have direct relationships with their respective municipal members and have addressed issues in land use, zoning, development, open space, and transportation planning. These relationships have been strengthened through the CPRG's PCAP process, which included significant public outreach to residents and local municipalities and where each COG examined potential GHG reduction measures in their region. COGs are also skilled in outreach and savvy about the local media markets to ensure that this measure gets the most attention as possible.

Through the PCAP process, each COG in turn identified this measure as a priority for their region. As lead applicant, if awarded EPA CPRG funds, WestCOG would submit a memorandum of agreement (MOA) by July 1, 2024, signed by all coalition members.

Section 2: Impact of GHG Reduction Measures

While land use regulations and processes can impact many emissions sources, the GHG emissions reduction values estimated for this application included five key elements.

1. Orienting for increased solar photovoltaic potential
2. Electric vehicle charging
3. Orienting buildings for thermal system energy reduction
4. Electrification of HVAC systems
5. Tree planting

The calculations are intended to reflect new residential development based on historic average housing permit data. It was recognized that some of these elements can overlap, and attempts were made to avoid double counting emissions reductions. Data sources and assumptions used to calculate the reductions are detailed within the Technical Appendix [Techappx_WestCOG.pdf] and the GHG Reductions Calculations Spreadsheet [GHGcalcs_WestCOG.xlsx] attached to this application.

Magnitude of GHG Reductions from 2025 through 2030

CO₂e, or carbon dioxide equivalent, is a unit that measures the global warming potential of different greenhouse gases, such as methane, nitrous oxide, and carbon dioxide. One metric ton of CO₂e means the amount of any GHG that has the same warming effect as one metric ton of carbon dioxide over a 100-year period. One metric ton of CO₂e is equivalent to the emissions from driving a car for about 4,000 kilometers (about the width of the United States), or from New York to Los Angeles.

This measure would show avoided GHG emissions as early as year 3, when the first communities begin adopting the Climate Friendly Land Use Regulations and Processes. The total, 2025-2030, for this measure came to 144,660 Total MTCO₂e.

Magnitude of GHG Reductions from 2025 through 2050

From 2025 to 2050, cumulative avoided GHG emissions from Climate Friendly Land Use Regulations and Processes totals to 1,079,151 Total MTCO₂e.

The benefits of this measure play out strongest overtime following the development patterns within each community in Connecticut.

Cost Effectiveness of GHG Reductions

The cost effectiveness of GHG reductions can be calculated by dividing the requested funding by the sum of the quantified GHG reductions. At \$14.55 per MTCO₂e for the 2025-2030 estimates and \$1.95 per MTCO₂e for the 2025-2050 scenario. This measure displays a promising cost-effective approach to avoiding emissions.

Cost per MTCO₂e (2025-2030) = \$2,104,753 / 144,660 MTCO₂e = \$14.55 per MTCO₂e

Cost per MTCO₂e (2025-2050) = \$2,104,753 / 1,079,151 MTCO₂e = \$1.95 per MTCO₂e

Documentation of GHG Reduction Assumptions

Documentation and reduction assumptions are provided in the Technical Appendix [Techappx_WestCOG.pdf] and the GHG Reductions Calculations Spreadsheet [GHGcalcs_WestCOG.xlsx] attached to this application.

Section 3: Environmental Results – Outputs, Outcomes, and Performance Measures

Expected Outputs and Outcomes

The measure includes a defined output (Climate Friendly Land Use Toolbox) which will directly guide the technical assistance effort working towards the overall outcome: local adoption of Climate Friendly Land Use Regulations and Processes for at least 50 municipalities in Connecticut. The specific experiences for these communities will then feed an additional output, an addendum to the Toolbox which includes municipal case studies. The outputs and outcomes are explained in further detail below.

Output. Climate Friendly Land Use Toolbox

Noted as “Milestone II,” the toolbox will be drafted by the contracted technical assistance consultant and informed through COG staff, coalition members, municipal working group meetings, and public meetings. The Anticipated regulations and processes to be explored (based on existing research and studies) are included above in Section 1. Additionally, regulations will be developed around typology: urban, suburban, rural. These specific typologies of model regulations will accelerate the adoption process across the state (and hopefully, in New England).

Outcome. Local Adoption

Working through coalition members and their respective member communities, this measure will work directly with 50 municipalities to craft local specific language (based on the typologies outlined in the toolbox), troubleshoot challenges, and provide education for municipal decision makers and zoning commissions to bring the model language across the finish line and into local adoption.

Note that policy diffusion is common among municipalities in Connecticut – that is, municipalities regularly copy or adapt from their neighbors and peers. It is expected that the reforms adopted by municipalities participating in Phase 2 will ‘seed’ future regulatory and process reform elsewhere in Connecticut beyond the end of the project period. Based on historical experience, each regulatory or process innovation a municipality in Connecticut undertakes inspires at least one (and often several) adoption and implementation in other municipalities, so it is expected that the project will result in the

majority of municipalities in Connecticut adopting and implementing climate-friendly and low-carbon regulations and processes.

Output. Case Studies Addendum

During the local adoption process, the contracted technical assistance consultant will have substantial notes regarding the questions and challenges that will be used to inform a series of case studies to be included as an addendum to the Climate Friendly Land Use Toolbox. With the Toolbox to serve as a legacy model for further communities to adopt, having specific relatable case studies provides interested communities a contact and point of reference when they undertake their own efforts to adopt climate friendly land use practices.

Outcome. Prevent GHG Emissions.

Substantial amounts of avoided GHG pollution are anticipated through the implementation of this measure, with reduction cost benefits up to \$1.95 per MTCO₂e. See Section 2 for more details on emissions reductions for this measure.

Performance Measures and Plan

This measure has four identified outputs/outcomes as part of its implementation process. Specific measurable performance measures have been identified to track progress during quarterly reporting on progress. See the table below for details.

Output/Outcome	Performance Measure
Output. Climate Friendly Land Use Toolbox	Quarterly progress reports will be provided following the drafting, reviewing, and publishing of the toolbox.
Outcome. Local Adoption of Land Use Regulations and Processes (50)	Progress will be tracked in a Regulations and Processes Adoption Table depicting which regs have been adopted by which municipality. The target is to have 50 municipalities adopt regulations.
Output. Case Studies Addendum	As part of quarterly reports, newly added case studies will be noted as communities adopt the measure with a target of 50 entries over five years.
Outcome. GHG Emissions Reductions. (48,173 MTCO ₂ e/year)	Review of annual permit data to update GHG calculations cross referenced with the Regulations and Processes table. Permit data is reported annually and made available on the State Website.

Authorities, Implementation Timeline, and Milestones

The measure would be implemented by a coalition of eight Councils of Governments (COGs) with WestCOG as the lead agency. WestCOG would manage the implementation of the measure. WestCOG serves 18 member municipalities with a mission to collaboratively work with government and civic leaders to provide exceptional public services for Western Connecticut.

WestCOG would act as the liaison between the coalition members and the CPRG funding source. WestCOG would also provide guidance to the coalition members on the project's requirements, best practices, and quality assurance. WestCOG would monitor the progress and performance of the

partners and program to help ensure the project meets the timeline, budget, and reporting obligations. WestCOG would also be responsible for interfacing with the contracted technical assistance consultant.

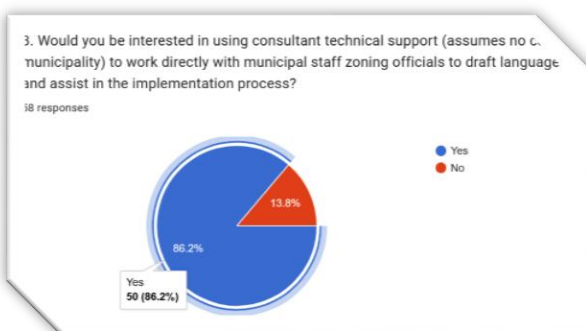
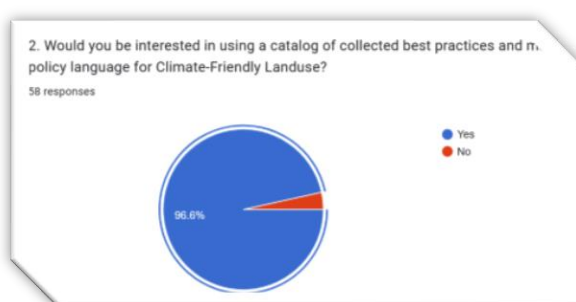
The coalition members are eight COGs: WestCOG, Connecticut Metropolitan Council of Governments (MetroCOG), Capital Region Council of Governments (CRCOG), Naugatuck Valley Council of Governments (NVCOG), Northwest Hills Council of Governments (NHCOG), South Central Regional Council of Governments (SCRCOG), Lower Connecticut River Valley Council of Governments (RiverCOG), Southeastern Connecticut Council of Governments (SCCOG). The coalition members are responsible for interfacing with their respective municipalities, local stakeholders and technical assistance consultants assigned to their regional area.

Each partner would provide regular updates and feedback to WestCOG on their implementation status, challenges, and lessons learned. Each partner would also submit their data and documentation to WestCOG for any necessary reports. Individual responsibilities are outlined below.

Time	Action	Entities
1 week	Convene Project Council	COG Coalition
6 weeks	RFP Process	WestCOG
2 weeks	Consultant Selection	COG Coalition
1 week	Contract Agreements	Consultant, WestCOG
3 weeks	Kick Off Meeting	Consultant, WestCOG, Coalition
1 year	Working Group Meetings	Consultant, WestCOG, Coalition
6 weeks	Toolbox Data Discovery	Consultant, WestCOG, Coalition
4 weeks	Drafting Toolbox	Consultant, WestCOG
2 weeks	Review Toolbox	Coalition
1 week	Publish Toolbox	Consultant
3 weeks	Technical Assistance Registration	Consultant, WestCOG, Coalition
2 weeks	Prioritization Process	Consultant, WestCOG, Coalition
12 weeks	Public Education Meeting	Consultant, WestCOG, Coalition
3 years	Case Study Addendum	Consultant
3 years	1-on-1 Technical Assistance	Consultant

Entities Whose Cooperation is Needed for Implementing the Measure

This effort would not be possible without the participation of municipal leaders, planners, zoning commissions and fellow local stakeholders. Thus, this measure intentionally engages with municipal partners through the Kickoff Meeting, Working Group Meetings, Public Meetings, and direct 1-1 technical assistance. Prior to the drafting of this application, planning and zoning officials were asked to fill out a survey to gauge interest for the services outlined in this measure. Responses were overwhelmingly positive, with a sample of 58 responses all registering interest for the service at over 80%. This is reflected also by the already strong relationships COGs have with their member communities, which will be leveraged through the coalition.



Section 4: Low-Income and Disadvantaged Communities

According to the CEJST and EPA EJ jurisdictions, Connecticut has 74 municipalities that include an area designated as Low Income/Disadvantaged Communities. A full. A summary of these communities is provided below while a detailed table of specific census block groups is attached to this application titled “Areas_WestCOG.xlsx”:

- | | | | |
|-------------------|-------------------|-------------------|-------------------|
| 1. Ansonia | 21. Ledyard | 42. Plymouth | 63. Waterford |
| 2. Berlin | 22. Manchester | 43. Portland | 64. Watertown |
| 3. Bethel | 23. Mansfield | 44. Preston | 65. West Hartford |
| 4. Bridgeport | 24. Meriden | 45. Putnam | 66. West Haven |
| 5. Bristol | 25. Middletown | 46. Redding | 67. Westbrook |
| 6. Cromwell | 26. Milford | 47. Rocky Hill | 68. Wethersfield |
| 7. Danbury | 27. Montville | 48. Seymour | 69. Wilton |
| 8. Darien | 28. Naugatuck | 49. Shelton | 70. Windham |
| 9. Derby | 29. New Britain | 50. Simsbury | 71. Windsor |
| 10. East Hartford | 30. New Fairfield | 51. South Windsor | 72. Windsor Locks |
| 11. East Haven | 31. New Haven | 52. Southington | 73. Wolcott |
| 12. Enfield | 32. New London | 53. Stamford | 74. Woodbridge |
| 13. Fairfield | 33. New Milford | 54. Stonington | |
| 14. Glastonbury | 34. Newington | 55. Stratford | |
| 15. Greenwich | 35. North Canaan | 56. Suffield | |
| 16. Griswold | 36. North Haven | 57. Thompson | |
| 17. Groton | 37. Norwalk | 58. Torrington | |
| 18. Hamden | 38. Norwich | 59. Trumbull | |
| 19. Hartford | 39. Old Lyme | 60. Vernon | |
| 20. Killingly | 40. Plainfield | 61. Wallingford | |
| | 41. Plainville | 62. Waterbury | |

It is well-established that low-income, disadvantaged communities bear the greatest burdens of climate change. These areas have also historically been treated as “sacrifice zones,” where high-emissions and pollution intensive land uses (like waste incinerators or industrial facilities) are more likely to locate. Improving the land use regulations and processes not only in these municipalities, but in the surrounding areas, will result in enduring impacts in reducing GHG pollution along with a suite of co-benefits. With LIDAC census tracts being strongly weighted in the prioritization process for technical assistance, LIDACs would be the first to realize GHG reductions and the co-benefits outlined below.

Direct and Indirect Benefits.

Implementing climate-friendly land use standards at the municipal level will result in development projects with lower carbon, energy, and resource footprints. The estimated impact of this proposal is a reduction in greenhouse gases to the tune of 48,173.92 MTCO₂e per year (See technical appendix for details). The bullets below explore Direct Benefits (✓) and Indirect Benefits (★).

- ✓ Climate change mitigation, by reducing emissions associated with land use and development.
 - ★ Decreased risk of extreme weather events, such as flooding, heat waves, hurricanes and tropical storms, droughts, and snowstorms.
 - ★ Decreased incidences of health issues associated with climate change, such as respiratory and heart diseases, pest-related diseases, or injury caused by extreme weather events.
 - ★ Increased green spaces and tree plantings, to sequester carbon.
- ✓ Climate change resilience and adaptation, through smart development practices.
 - ★ Reduced impervious surface will attenuate flood risk and urban heat island effect.
 - ★ Increased green space and trees will filter air pollution, attenuate floods, and provide shade for people and wildlife.
 - ★ Integration of distributed energy generation and microgrids will provide resilience during power-outages caused by extreme weather events.
- ✓ Greater energy efficiency and use of renewable energy in new buildings.
 - ★ Reduced heating costs.
 - ★ Reduced electrical costs.
 - ★ Reduced air pollution associated with fossil fuels.
 - ★ Expanded EV charging network.
- ✓ More clustered development and transit-oriented development.
 - ★ Increased green space.
 - ★ Walkable communities with better pedestrian facilities.
 - ★ Improved amenities for cyclists, like bike racks and bike lanes.
 - ★ Revitalization of commercial areas, spurring economic growth.
 - ★ Reduced air pollution from passenger vehicles.

- ★ Less taxpayer money spent on extending infrastructure to accommodate suburban sprawl.

✓ Sustainable housing reform.

- ★ Increased variety of housing stock (accessory units, mixed use).
- ★ Conversion of underutilized spaces, such as brownfields or garages, into housing options.
- ★ Innovative development practices (green roofs, low embodied carbon building materials).

✓ Developer-friendly.

- ★ Streamlining of certain land use processes.
- ★ Availability of financial incentives or tax breaks for climate-friendly practices.
- ★ Higher density standards allow greater potential profit, enabling more affordable and energy efficient housing.

Disbenefits. Potential risks and disbenefits to LIDACs because of this project are extremely limited. The inclusion of LIDAC representatives on the Project Council will help identify, track, and actively mitigate disbenefits.

Community Engagement

Extensive community engagement was conducted during the Priority Climate Action Plans for all parties involved with this Coalition. Outreach meeting focused on three tiers; COG and State engagement, municipal staff engagement, and public engagement. It is worth noting that the other MSA's PCAPs reflecting coalition members utilized just as intensive (or more intensive) outreach efforts listed below.

COG/State Engagement. State and COG coordination occurred bi-weekly, with additional meetings scheduled as needed to discuss specific topics. The timeframe included weekly meetings from Fall 2023 through February 2024. Active participants included WestCOG, MetroCOG, NVCOG, CRCOG, NWHCOG, SCRCOG, RiverCOG, and SCCOG. Participants routinely discussed their emerging priorities and shared their ideas. The Connecticut Department of Energy & Environmental Protection held regular coordination calls.

Municipal Engagement. Municipal coordination occurred in December 2023 and January 2024. This tier included a combination of in-person and virtual meetings designed to obtain input from municipal staff, chief elected officials, specific committees that are already in place (generally, those aligned with climate action and sustainability topics), and redevelopment agencies. Eight meetings were held to collect input from 24 municipalities. Additionally a public survey was shared with planning professionals across the state to gauge interest for this measure outlined in the end of Section 3.

Public Engagement. Public and stakeholder engagement included virtual opportunities for the general public and in person workshops in the City of Bridgeport, where the highest number of LIDAC communities are located. Public engagement also included two surveys (one for the region and one conducted by the City of Bridgeport for residents) and a stakeholder meeting for the Bridgeport Regional Energy Partnership (BREP) held on January 25, 2024. Local municipal staff and State representatives also attended these engagement events. Meetings were also held with the Connecticut Equity and Environmental Justice Advisory Council (CEEJAC) (January 9, 2024) and the Connecticut Conference of Municipalities (CCM) (November 14, 2023) to allow for discussion focused on issues of

concern. CEEJAC provided insight and ideas about enhancing public engagement in LIDAC communities, and CCM provided comments relative to high-level climate mitigation efforts in the State's member municipalities.

Future Outreach

The Climate Friendly Land Use Measure will build upon the existing outreach efforts from the PCAP planning process. COG and state coordination will occur through regularly occurring COG coordination meetings, and annual public meetings to report project progress and collect public input. We'll use existing public participation practices used at the COGs and will consider the following:

- Inclusion of cultural, institutional, geographic perspectives throughout the project process.
- EPA's Guidance on Capacity Building through Effective Meaningful Engagement.
- Ample lead time for public meetings.
- Time scheduling to maximize public participation
- Inclusion of local zoning board members.
- Justice 40 Targets for Project Outcomes

Ultimately, the adoption of each suite of municipal zoning or subdivision regulations will take place during a public hearing process, per the Connecticut General Statutes. Residents will be notified of public hearings through legal notices posted in newspapers with substantial circulation and an online posting on the municipal website. Residents will have the ability to provide written or oral testimony in relation to the proposed text amendments.

Section 5: Job Quality

The Climate Friendly Land Use measure is focused on the adoption of targeted regulations/processes through local adoption and thus does not directly generate high-quality family-sustaining jobs as detailed in the "Job Quality Criterion." However, it is worth noting that adoption of Climate Friendly Land Use Regulations and Processes will enable future opportunities in the sustainability field, for example policies that maximize solar potential based on roof orientation will lend themselves to future solar installations thereby creating job opportunities that would otherwise not exist. Other potential

Section 6: Programmatic Capability and Past Performance

Technical Capacity

WestCOG operates two metropolitan planning organizations covering 18 municipalities conducting and implementing transportation studies and planning documents for decades. To conduct its planning work, WestCOG has received a variety of funding sources from a variety of agencies. WestCOG staff are knowledgeable of federal rules, codes, regulations, and compliance with Title VI/Civil Rights requirements, procurement processes, NEPA (National Environmental Policy Act) requirements, and Buy America provisions.

WestCOG's Administrative Staff accurately records, reports, and safeguards the financial assets and activities of WestCOG, managing and maintaining financial records in conformity with generally accepted accounting principles (GAAP) and in compliance with State and Federal laws. The department develops and maintains effective and efficient financial planning, reporting and central support systems to support WestCOG's planning initiatives. Relevant activities have included: Contract Management, Accounting and Reporting, Budget Preparation, Cash Receipts, Cash Management,

Accounts Payable and Accounts Receivable, Payroll & Benefits Administration, and Preparation of Annual Audits.

Past Performance

WestCOG annually administers programs totaling tens of millions of dollars in State and Federal capital improvement funding, and directly manages over millions in Federal funds originating from several Federal agencies, including U.S. Department of Transportation, U.S. Department of Homeland Security, U.S. Department of Commerce, U.S. Environmental Protection Agency. WestCOG is currently on track to manage \$10 million in planning projects in the coming year. Below are five relevant projects to highlight the breadth of project management at WestCOG.

Transportation Planning funds for HVMPO and SWRMPO

Assistance Agreement Number: ED21PHI3020007

Listing Number: 20.205

Funder Contact: Olivia Rizzuto, CCT Intergovernmental Affairs. ph.860-594-2336. Email olivia.rizzuto@ct.gov

Description: MPOs are the federally mandated organizations designated by the Governor as the forum for cooperative transportation decision-making. WestCOG's MPOs produce a regularly updated Metropolitan Transportation Plan which directs the regions funding goals for transportation planning. WestCOG and its historical counterparts have been in federal compliance since the origin of the MPOs in the 1960's.

Reporting Requirements: WestCOG reports monthly in compliance to federal reporting requirements. WestCOG also meets compliance with: Title VI of the Civil Rights Act of 1964, the Americans with Disabilities Act of 1990 (ADA), Executive Order 13166 "Improving Access to Services for persons with Limited English Proficiency and Executive Order 12898 "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations". WestCOG also reports monthly to the two MPO boards and their respective members.

Regional Value Capture Study. EDA BUILD Grant

Assistance Agreement Number: CT-2022-018-00

Listing Number: N/A

Funder Contact: Richard A. Schreiner, Chief Executive Officer HARTransit. Ph. 203-744-4070 x129. Email: ricks@hartransit.com

Description: The U.S. Department of Transportation has awarded a \$400,000 grant to the Western Connecticut Council of Governments, which includes Wilton, Ridgefield, New Canaan, Danbury and Norwalk along the branch lines, to study potential revenue sources to make improvements. One of the mechanisms that will be looked at is a tax increment financing district. WestCOG has an active project council, and regularly coordinates with its contractual partners working towards the completion of the study.

Reporting Requirements. WestCOG serves as program coordinator overseeing grant completion but utilizes HARTransit for the upload of grant data into the TrAMS program.

Regional Service Grant Awards

Assistance Agreement Number: State of CT Grant. OPM. RSG-24-09

Listing Number: 12060-OPM20600-35457

Contact:

Description: WestCOG has received CT State Funding to provide regional services for its member municipalities. WestCOG's Regional Affordable Housing Toolbox is notable given its similarity to this effort's milestone to create a Land Use Toolbox. Published in 2022, WestCOG developed the Regional Affordable Housing Toolbox which outlines a host of strategies for municipalities to utilize in the development of Municipal Affordable Housing Plans. The plans were in response to a state policy mandate, and the toolbox was utilized by member municipalities and served as the basis the development of adopted local Affordable Housing Plans in most member municipalities.

Reporting Requirements. WestCOG provides Annual Reports^{ix} to the State of Connecticut Office of Policy and Management. The annual reports provide a summary of expenditure of grant funds, descriptions of each funded regional program, a performance summary for each initiative, and recommendations for improvements. All annual reports are publicly available on WestCOG's website.

Branchville-Georgetown Sewer Feasibility Study. EPA Congressionally Directed Spending (CDS)

Assistance Agreement Number: EPE-CP

Listing Number: 66.202

Contact: Mark Spinale, Manager Municipal Assistance Section EPA Region 1. Ph. (617-918-1547). Email: spinale.mark@epa.gov

Description: Recently awarded, this project is entering its RFP process. The project is to conduct a sanitary sewer feasibility study for the Branchville section of the Town of Ridgefield and the Georgetown section of the Town of Redding. Study tasks will include: Review/analysis of information and reports on existing Branchville and Georgetown wastewater collection/treatment infrastructure; Determination of existing and projected flow characteristics of overall study area and applicable watershed; Preparation of a conceptual layout and capital cost estimates for a wastewater conveyance system, and Preparation of a comprehensive report with projected financial effects upon property owners, potential funding sources, and supporting documentation.

Reporting Requirements. Provide annual reports using "EPA Reporting Form 5700 52a". Forms require updates on project status, funding amounts, CDS compliance, and if any additional assistance is required.

EDA Long Term Recovery Planning

Assistance Agreement Number: 17DOT0177AA

Listing Number: 11.307

Funder Contact: Deborah Bevin Economic Development Representative, Connecticut, Massachusetts & Rhode Island Economic Development Administration. Ph. 267-559-3385. Email: dbeavin@eda.gov

Description: WestCOG hosts the Western Connecticut Economic Development District (WCEDD) and was charged to deliver economic recovery through the CT's Statewide Long-Term Recovery Coordination, Resiliency Planning & Technical Assistance Program. WestCOG's role was to develop an economic resilience plan, assist with long term recovery through the Department of Homeland Security, and to perform a study on technology opportunities for economic recovery which had an emphasis on fiber communication networks.

Reporting Requirements: WestCOG was charged with providing quarterly reports on funding, project status, and aggregate metrics. Reporting also provided space to identify potential challenges and delays. This project was completed on schedule.

Staff Expertise

Short bios provided as well as a collection of resumes in the attachment “Bios_WestCOG.zip”

Francis Pickering, Executive Director. Francis directs WestCOG’s staff and represents the region to partners, including state and federal agencies. Prior to joining WestCOG, he served as Deputy Director at the Central Connecticut Regional Planning Agency (CCRPA). His work has been recognized with CCAPA’s Innovative Plan of the Year in 2013, and NADO’s Innovation Award in 2014, and CACT’s Friend of Public Transportation in 2019. Francis is also active in the development of major regional transportation initiatives and serves on the Connecticut Bicycle and Pedestrian Advisory Board and the Association of Metropolitan Planning Organization’s Technical Committee. Francis holds an M.A. in Environmental Management from the Free University of Berlin (Germany) in addition to a B.A. from Princeton University and an M.A. in Geography from the University of Connecticut.

Michael Towle, Deputy Director. Michael oversees WestCOG’s regional services, environmental planning, analytics, public outreach, and staff activity at WestCOG. With ten years of experience in Regional Planning, Michael has worked in managing and reporting on federal and state grant programs, plan development, data analysis, contractual oversight, budget development, grant writing, and data visualization and analytics. Michael oversaw the development of regional classification of zoning data, as well a Statewide zoning database of zoning codes through Sustainable CT. He received a B.S. in Environmental Science from UMass Lowell and a M.S. in GIS from Clark University.

Charles Vidich, Senior Project Manager. Charles has over 40 years of experience in planning and government, including as the Principal Planner at the Council of Governments of the Central Naugatuck Valley, where he developed plans, regulations, and legislation related to regional and local planning. He has also served as Manager of Environmental Programs at the United States Postal Service Northeast Region, where he supervised the permitting, environmental review processes and government relations work for a \$2 billion annual facilities program; at the national level he served in various capacities including as Incident Commander at the USPS’ Unified Incident Command Center, where he was responsible for anthrax response and coordinating Hurricane Katrina response efforts; as Manager for Corporate Sustainability Initiatives at USPS Headquarters, where he oversaw initiatives at 32,000 post offices nationwide; and as a visiting scientist at the Harvard School of Public Health where he conducted research and lectured on quarantine and the challenges of controlling communicable disease outbreaks. Charles has received numerous honors and distinctions, including awards from Presidents Clinton and George W. Bush and Vice President Gore.

Kristin Floberg, Senior Planner. Kristin has eight years of experience in planning and engineering, including her role as Senior Planner at the Western Connecticut Council of Governments where she managed the development of several core planning projects such as the first Western Connecticut Regional Plan of Conservation and Development and the Metropolitan Transportation Plans. Kristin also has extensive experience on land use topics having developed WestCOG’s Affordable Housing Toolbox, drafted a zoning strategy regarding wireless telecommunications, oversight on regional land use referrals, and through trainings for WestCOG’s land use commissions. She graduated from the University of Connecticut with a M.S. in Transportation and Urban Engineering and a B.S. in Civil Engineering. Kristin’s graduate research on walkability and urban development was recognized at the Congress for New Urbanism Annual Congress and the Association of American Geographers Annual Meeting.

Section 7: Budget

The budget narrative provides a description of the nature of each task along with a funding justification based on estimated hours and costs. This measure has planned expenditures for Personnel, Contractual and Indirect. No other expenditures are covered under this budget narrative. Additionally, an “Expenditure of Awarded Funds” Section is provided to highlight the approach, procedures, and controls WestCOG and its Coalition has in place to ensure an effective delivery of this measure.

Please see the Budget Narrative (“Budget_WestCOG.pdf”) and the Budget Sheet (“BudgetCalcs_WestCOG.xlsx”) attachments for additional details.

References

ⁱ Decarbonizing Land Development Practices. Drafted by WestCOG, 2022.
<https://westcog.org/2022/12/solar-zoning-strategies/>

ⁱⁱ Flooding in Connecticut: A Status Report on Municipal Flood Prevention Standards. Drafted by WestCOG, 2021.
<https://westcog.org/2021/03/flood-prevention-zoning-strategies/>

ⁱⁱⁱ The Case for Riparian Corridor Protections. Drafted by WestCOG, 2021 <https://westcog.org/2021/08/riparian-corridor-protections-zoning-strategies/>

^{iv} Policy on Resilient Forests for Connecticut’s Future. Drafted by CCM, 2021.
<https://ctwoodlands.org/wp-content/uploads/2022/08/FINAL-PRFCT-Future-Working-Group-Recommendations-12.14.21.pdf>

^v Taking Action on Climate Change and Building a More Resilient Connecticut for All. Drafted by GC3, 2021
https://portal.ct.gov/-/media/deep/climatechange/gc3/gc3_phase1_report_jan2021.pdf

^{vi} Hartford-East Hartford-Middletown Priority Climate Action Plan. Drafted by CRCOG, 2024.
<https://crocog.org/wp-content/uploads/2024/02/CRCOG-FINAL-Priority-Climate-Action-Plan.pdf>

^{vii} Southwest Connecticut Priority Climate Action Plan. Drafted by MetroCOG, 2024.
https://ctmetro.s3.amazonaws.com/CPRG/SWCT_PCAP_2024-03-01_Final.pdf

^{viii} Impact 2045. Drafted by SCRCOG, 2024.
<https://www.cprgct.org/>

^{ix} WestCOG Annual Reports. Drafted by WestCOG annually.
<https://westcog.org/reports-audits/>