

Reducing Climate Pollution in Southern Worcester County

April 4, 2024

2024 Environmental Consultation
Central Massachusetts Regional
Planning Commission



Agenda

- ▶ Climate Pollution Reduction Grant overview
- ▶ Definition of the Worcester, MA-CT Metro Area
- ▶ Project Team
- ▶ Overview of air pollution emissions by 6 major sectors
- ▶ Transportation GHG Emissions
- ▶ Transportation Strategies in the Priority Climate Action Plan
- ▶ Next Steps

Climate Pollution Reduction Plan Grant Overview

- ▶ Funded through the US Environmental Protection Agency (EPA) & Inflation Reduction Act (IRA) in March 2023
 - ▶ *No local or agency match required!*
- ▶ **Goal:** Develop short & long-term plans to reduce climate pollution across the Worcester, MA - Eastern CT region
- ▶ CMRPC is working closely with the states of Connecticut and Massachusetts to develop plans and action items, as well as MAPC and SRPEDD
- ▶ Deliverables:
 - ▶ Priority Climate Action Plan was due March 1st
 - ▶ Implementation Grant application was due April 1st
 - ▶ Comprehensive Climate Action Plan due Summer 2025
 - ▶ Status Report due at the end of the grant in Summer 2027



Project Team

- ▶ Central Massachusetts Regional Planning Commission is leading the planning process
 - ▶ RCCP and Transportation staff are involved
- ▶ Montachusett Regional Planning Commission & Northeast Connecticut Council of Governments
 - ▶ Assisting in community engagement in their respective regions
- ▶ Weston & Sampson is leading the data analytics

Six Main Air Polluting Sectors

1) *Transportation*



4) *Commercial and Residential Buildings*



2) *Electricity*



5) *Waste Management*



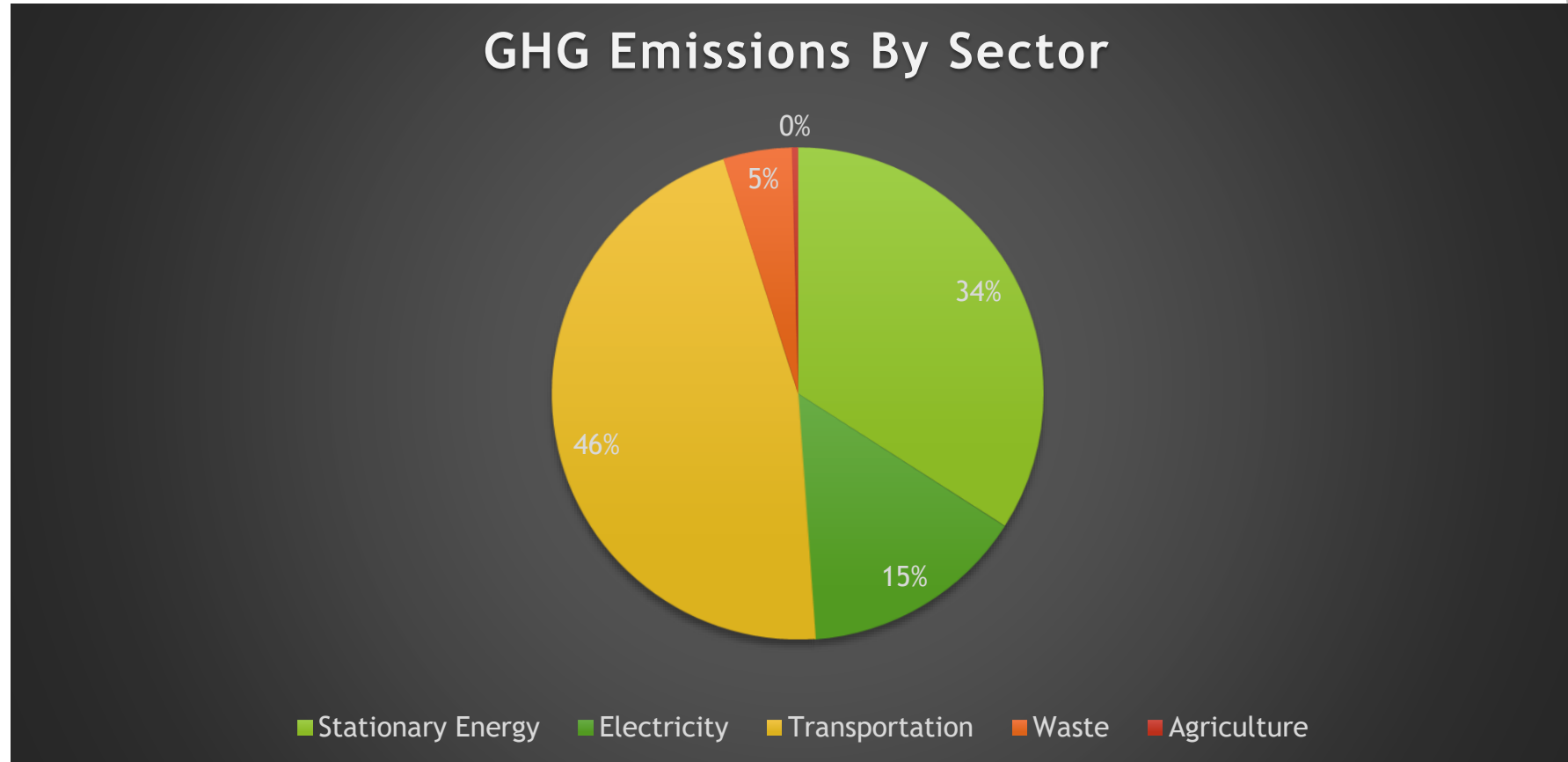
3) *Industry*



6) *Agriculture / Natural and Working Lands*



Greater Worcester Region GHG Inventory



Transportation Emissions Data - Greater Worcester Region

Subsector	Source	Scope	Carbon Dioxide Emissions (MT CO2)	Methane Emissions (MT CH4)	Nitrous Oxide Emissions (MT N2O)	Carbon Dioxide Equivalent Emissions (MT CO2e)	Carbon Dioxide Equivalent Emissions (MMT CO2e)	Percent of Total
On Road	Diesel	1	551,790.50	27.26	19.48	557,715.46	0.56	5%
	Electricity	2	1,313.32	0.14	0.02	1,322.11	0.00	0%
	Electricity T&D Losses	3	67.29	0.01	0.00	67.72	0.00	0%
	Gasoline	1	5,004,073.90	247.20	176.64	5,057,806.14	5.06	46%
Rail	Diesel	1	10,753.86	0.53	0.38	10,869.33	0.01	0%

2014 and 2020 MA Vehicle census

Transportation Emissions Data - CMRPC

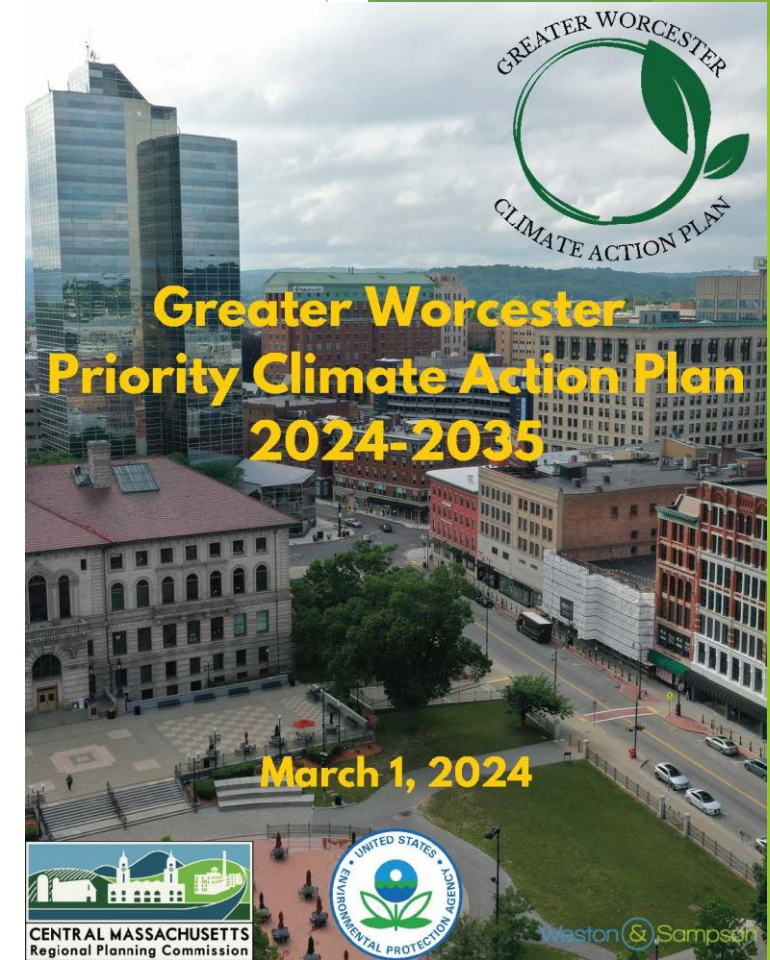
Subsector	Source	Scope	Carbon Dioxide Emissions (MT CO2)	Methane Emissions (MT CH4)	Nitrous Oxide Emissions (MT N2O)	Carbon Dioxide Equivalent Emissions (MT CO2e)	Carbon Dioxide Equivalent Emissions (MMT CO2e)	Percent of Total
On Road	Diesel	1	100,193.82	4.95	3.54	101,269.68	0.10	0.9%
	Electricity	2	841.88	0.08	0.01	847.19	0.00	0%
	Electricity T&D Losses	3	43.19	0.00	0.00	43.46	0.00	0%
	Gasoline	1	2,096,040.57	103.54	73.99	2,118,547.22	2.12	19.2%
Rail	Diesel	1	10,753.86	0.53	0.38	10,869.33	0.01	0.1%

2014 and 2020 MA Vehicle census

1/5 of all emissions in the Greater Worcester Region comes from gasoline and diesel vehicles in the CMRPC region

Greater Worcester Priority Climate Action Plan

- ▶ Available to view at www.cmrpc.org
- ▶ 4 Transportation Goals
 - ▶ Reduce overall vehicle travel demand and improve mobility for all modes of transportation (i.e. active transportation and transit)
 - ▶ Improve the operational efficiency of freight and fleet
 - ▶ Improve fuel efficiency
 - ▶ Electrify personal transportation networks and scale up fuel switching efforts



Greater Worcester Priority Climate Action Plan

- ▶ 6 Priority Transportation Strategies
 - ▶ Expand fare-free public transit service
 - ▶ Electrify regional public transit buses and install associated charging infrastructure
 - ▶ Implement 30 miles of protected bike lanes and shared-use paths in EJ communities
 - ▶ Purchase 10 Electric or hybrid vehicles to expand ridesharing/shuttle service with priority given to communities without access to regional transit and EJ communities
 - ▶ Implement bike-sharing in EJ communities
 - ▶ Electrify senior vans in EJ communities

Massachusetts Priority Climate Action Plan

- ▶ 3 Priority Transportation Strategies
 - ▶ Adopt Zero Emission Medium- and Heavy-Duty Vehicle
 - ▶ Medium-duty transit vans, delivery vans/trucks, school buses
 - ▶ Heavy-duty vehicles, including large trucks and transit buses
 - ▶ Adopt Zero Emission Light-Duty Vehicles
 - ▶ Low/Zero emission passenger vehicles
 - ▶ Increase Alternatives to Personal Vehicle Use
 - ▶ Increase short-distance transportation alternatives
 - ▶ Expand and electrify rail service

Next Steps

- ▶ CMRPC will develop the Greater Worcester Comprehensive Climate Action Plan
 - ▶ Focusing on 2035-2050 emissions reduction efforts
 - ▶ Looks at policies/procedures/regulations/and projects that will continue to reduce emissions long term
 - ▶ Will look at all transportation modes
- ▶ The Massachusetts Office of Climate Innovation and Resilience and the Department of Transportation will create the Statewide Comprehensive Climate Action Plan
- ▶ Significant cross-agency support will take place in the development of these plans.

Next Steps (cont.)

- ▶ CMRPC Resiliency staff members will work closely with the CMRPC transportation department to create a strategy to keep the transportation portion of the PCAP active
- ▶ Transportation staff and the Long-Range Transportation Plan will be instrumental in the formation of the CCAP's transportation chapter
- ▶ Weston & Sampson will update the GHG emissions baseline to a more recent year and will create emissions projections out to 2050
- ▶ We intend to meet with the CMMPO at least once during the CCAP outreach for plan input.
- ▶ We intend to work closely with the WRTA as well for transit strategies

Thank you!

Questions can be sent to CPRG@cmrpc.org

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