

Heart of Iowa Regional Transit Agency - HIRTA Climate Action Plan 2022-2050



Board approved 4/28/2022

Contents

1. Introduction	2
2. Agency Overview.....	3
3. Emissions Inventory.....	5
4. Past and Current Initiatives	5
5. Emission Reduction Goals and Targets.....	6
6. Strategies and Actions	7
7. Implementation and Monitoring	9



Climate Action Plan purpose is to provide a framework to:

- 1) Reduce greenhouse gas emissions from the Heart of Iowa Regional Transit Agency (HIRTA) regional transit operation;
- 2) Increase the resilience of HIRTA’s transit system to future climate impacts;
- 3) Identify climate mitigation goals, strategies and actions;
- 4) Improve the overall quality of life of those who live in communities we serve.

I. Introduction

The United States of America Nationally Determined Contribution Reducing Greenhouse Gases in the United States: A 2030 Emissions Target report, states climate change is an existential threat and demands bold action. After a careful process involving analysis and consultation across the United States federal government and with leaders in state, local, and tribal governments, the United States is setting an economy-wide target of reducing its net greenhouse gas emissions by 50-52 percent below 2005 levels in 2030. The Intergovernmental Panel on Climate Change has stated that achieving net-zero greenhouse gas (GHG) emissions globally by 2050 is essential to stabilizing global temperatures at 1.5 degrees Celsius above preindustrial levels and reducing the devastating health and economic impacts of the climate crisis.

Transportation is the highest source of GHG emissions in the United States, accounting for 29 percent of U.S. emissions. In Iowa, according to the Iowa Department of Natural Resources 2020 Iowa Statewide Greenhouse Gas Emissions Inventory Report, GHG emissions from transportation is down 9.53% from 2019 to 2020. This shows due to the Global Pandemic in 2020, which forced people to stay home, fewer cars were on the road, and that lessened GHG emissions.

This unexpected life event has given Public Transit agencies an opportunity to look at how they can be a larger part of the solution. Prioritizing the movement of people using sustainable modes of transit, rather than individual cars, delivers vast benefits including, improving air quality which improves the health of those in our communities.

Public transportation is a vital social determinant of health in rural communities. The availability of reliable transit options impacts a person's ability to access appropriate and well-coordinated healthcare, purchase nutritious food, and otherwise care for him- or herself.

The American Heart Association conducted research that found people who take public transit are 44% less likely to be overweight, 27% percent less likely to have high blood pressure, and 34% percent less likely to have diabetes, when compared to people who drive.

By 2030, every Baby Boomer will be age 65 or older, which means that 1 out of every 5 Americans will be of retirement age. AARP research show that Americans outlive their ability to drive a care by an average of 7-10 years. 41% of lowans age 65 and over live in rural areas and to keep them active, connected, and independent, transit must be a priority. If it isn't, then the final decade of life can mean a forced decision between social isolation or being forced into the dangerous decision to keep driving.

Shifting people out of cars and into active travel, particularly walking, cycling and public transit, typically leads to more physical activity and can significantly lower risks of depression, anxiety, stress, obesity and chronic disease and GHG emissions.

The bottom line is, an unstable climate threatens the stability of our communities, economy, and cultures. Climate change isn't an isolated issue. It is woven into everything HIRTA does, including, providing safe, reliable, efficient transit services throughout our region.

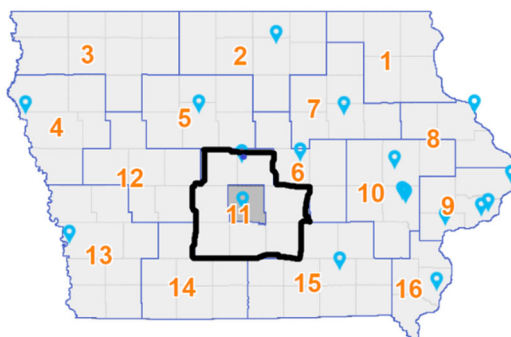
2. Agency Overview

HIRTA connects the people from its seven-county Central Iowa region to opportunities available across the region, including, medical, food, employment and social events.

Prior to the pandemic HIRTA provided 300k rides annually across its 4149 square mile region of 365,118 population. Its riders help achieve environmental sustainability when they choose its services of to provide them with a safe and reliable transit. With each trip, HIRTAs operations help reduce vehicle miles traveled and, therefore, greenhouse gas emissions.

HIRTA began operations in 1986 with two staff and 100% of the operation contracted to 8 service agencies. In 2011, HIRTA started operating services directly in one of our counties and by 2019 all our operations were provided in-house by HIRTA's 96 employees.

The HIRTA Board of Director is composed of appointed elected officials, with one seat for each of the seven counties we serve: Dallas, Boone, Story, Jasper, Marion, Warren, and Madison.



The agency is proud to provide safe, efficient, quality service to its customers and consistently, and strives to be an industry leader in rural transit by being innovative and forward-thinking in technology and service modes.

HIRTA provides door to door service, as well as, volunteer transportation and vanpool. HIRTA is exploring the addition of a scheduled stop service in one of our communities, as a pilot program, during the second half of 2022. HIRTA also plans to upgrade its service model to include on-demand services in 2022.

Of the 35-state designated public transit agencies in Iowa, HIRTA is the only transit system that does not have our own facility, but rather have eased lots throughout its region for logistics and bus storage. As HIRTA continues to look for permanent facility solutions, sustainability and reducing emissions in, not just transit but across all travel modes is part of that consideration. To that end, HIRTAs goal is to own and operate a regional multi-modal facility.

Additionally, HIRTA is considering how Central Iowa intensifying climate hazards - wind, drought, intense rainfall, and drastic temperature highs and lows - will both impact its fleet and facility, as well as the public's needs for their services.

OUR MISSION

Provide customer-focused community transportation with a commitment to excellence in safety and service promoting independent lifestyles for central Iowa residents.

OUR VISION

To become the transit provider of choice making a positive difference by enhancing community livability through safe, innovative, sustainable regional transportation options and promoting independent lifestyles for central Iowa residents.

OUR VALUES

SAFETY: We emphasize safety in everything we do. We are committed to providing safe, secure, and clean public transit vehicles and work sites.

SERVICE EXCELLENCE: We serve the public, each other, and our community partners with friendliness, courtesy, respect, and dignity. We recognize our customers are why we exist, and we take pride in the positive impact we make in their daily lives.

COMMUNICATION: We foster trust, inclusiveness, and cooperation in our communication. We promote an open, respectful culture, where opinions and ideas are shared and where candor is valued. We listen to and actively engage our customers, community partners, and employees.

INNOVATION: We encourage and respect new and challenging ideas from employees, partners, and the public. We use innovation, technology, and best practices to anticipate and respond to the future needs of our community.

ACCOUNTABILITY: We take responsibility for our actions as individuals and as an organization. We are accountable as stewards of public funds and community trust; we honor this commitment with transparency, honesty, and integrity.

Reach long-term
ambition for
net zero
emissions
by 2050.

3. Emissions Inventory

Due to the COVID-19 pandemic and disruptions that caused in service provided, HIRTA chose to create a fleet emissions inventory for both 2019 and 2020 to ensure a full picture of the agency’s fleet of gasoline bus fleet emissions are captured here.

HIRTA Fleet Emissions Totals				
Year	Gallons	Miles	Annual MTCO2e	Annual MTCO2e per VMT
2019	182,961	1,300,059	1619	0.00124519
2020	128,076	942,529	1134	0.00119884

HIRTA Fleet Emissions by GHG			
Year	CH4 Emissions (grams) to MTCO2e	N2O Emissions (grams) to MTCO2e	CO2 (grams) to MTCO2e
2019	1	11	1,606
2020	1	8	1,125

These abrupt changes create the need for HIRTA to further study its greenhouse gas emissions in 2-4 years to determine any trends. However, the year 2019 is a good baseline year for its current and ongoing efforts, and therefore, HIRTA will use this metric for comparisons in here and in the future.

Accounting emissions is new to the HIRTA business model, and therefore, the agency has no data to provide in regard to facility, administrative, solid waste & recycling, or any displaced emissions. As HIRTA continues to enact a climate commitment through this plan, staff will begin creating a standard operating procedure to account for these in future iterations of this document.

4. Past and Current Initiatives

HIRTA inherently is a climate solution through the general nature of its services. However, its participation in the Federal Transit Administration’s *Sustainable Transit for a Healthy Planet* challenge, it has only begun to scratch the surface on sustainability initiatives it could tap into.

To date, HIRTA has looked towards the [Iowa Department of Transportation’s Long-Range Plan – Iowa in Motion](#) for guidance and direction. Specifically, goal area 3: Facility, Fleet and Personnel. These strategies hone in on transit agency’s ability to: right-size bus fleets, adopt alternative fuel vehicles, increase mode shift, and invest in transit operational facilities. With the guidance of this plan and future transit innovation, HIRTA aims to clarify and move forward as a climate solution.

5. Emission Reduction Goals and Targets

Goal 1 – Invest in and partner to advance electrifying Central Iowa transportation modes and infrastructure.

- Invest in electrifying HIRTAs fleet
- Invest in EV infrastructure throughout Central Iowa communities, large and small;
- Invest in EV public charging infrastructure at HIRTA facilities;
- Invest in alternative fuel, hybrid or electric non-revenue support vehicles;
- Replace 100% of fleet with alternative fuels and/or electric buses by 2050;
- Decrease total GHG emissions from transit fleet by 25% by 2030;

Goal 2 – Invest in climate-ready multi-modal Central Facility.

- Build LEED-certified multi-modal facility that incorporates both climate action and hazard mitigation;
- Audit and invest in sustainability throughout HIRTA operations, including offices, purchasing, and infrastructure.
- Assure future maintenance facilities accommodate zero-emission technologies ;

Goal 3 – Continue to expand HIRTA’s climate solutions portfolio through education, collaboration, and innovation.

- Research and develop and workable long-range vehicle replacements plan;
- Research and build indoor bus storage facilities throughout region;
- Market and promote public transit to maximize community ridership;
- Incorporate U.S. Department of Transportation’s *Charging Forward: A Toolkit for Planning and Funding Rural Electric Mobility Infrastructure* into HIRTA operations.

6. Strategies and Actions

Goal	Strategy	Actions	Performance Metrics	Timeframe	Responsible Office	
<p><i>Invest in and partner to advance electrifying Central Iowa transportation modes and infrastructure.</i></p>	<p><i>Electrify Fleet</i></p>	Replace (5) buses w/ electric		2023		
	<p><i>Invest in Regional EV infrastructure</i></p>	<p>Work with partners on NEVI implementation</p>				
	<p><i>Public Charging at HIRTA Facilities</i></p>	<p>Purchase 5 Charging Stations</p>			2023	
	<p><i>Alternative Fuel Non-Revenue Fleet</i></p>					
	<p><i>Replace 100% of Fleet by 2050</i></p>					
<p><i>Decrease Emissions by 25% by 2030</i></p>						
<p><i>Invest in climate-ready multi-modal Central Facility.</i></p>	<p><i>Multi-modal Facility</i></p>	Continue to seek funding for facility				
		Research best building practices				
	<p><i>HIRTA Sustainability Audit</i></p>	<p>Inventory of HIRTA purchases and facilities</p>				
	<p><i>Future Zero-Emission Integration</i></p>					

Goal	Strategy	Actions	Performance Metrics	Timeframe	Responsible Office	
<i>Continue to expand HIRTA's climate solutions portfolio through education, collaboration, and innovation.</i>	<i>Long-Range Vehicle Replacement Plan</i>	In progress		9/31/2022		
<i>Continue to expand HIRTA's climate solutions portfolio through education, collaboration, and innovation.</i>	<i>Long-Range Vehicle Replacement Plan</i>					
		<i>Regional Indoor Bus Storage</i>				
		Identified Need		4/1/2022		
	<i>Regional Indoor Bus Storage Marketing and Promotion</i>	Priorities 1) Boone, 2) Madison, 3) Jasper, 4) Marion 5) Warren				
		Seek Funding		Ongoing		
	<i>Marketing and Promotion Incorporate Charging Forward</i>					
	<i>Incorporate Charging Forward</i>					

7. Implementation and Monitoring

Reducing greenhouse gas emissions and adapting to changing climate conditions **will require collective action** at the local, regional, state and federal level. It will also require innovative projects, strategic investments, policy changes and community support that are consistent with climate action goals.

Over the next two years, there will be regular meetings of key staff to identify other key agencies within the HIRTA region to adjust and flex its strategy as needed, and track progress of its implementation actions.

Action Items		Lead
ACTION 1		HIRTA
ACTION 2	<i>Identify and secure funds to help convert HIRTA's current vehicle fleet to zero emission vehicle</i>	HIRTA
ACTION 3	<i>Identify and secure funds to build LEED Certified centralized Administrative and Maintenance Facility</i>	HIRTA
ACTION 4	<i>Identify and secure funds to build/purchase a facility for Bus Storage in each of our 7 counties.</i>	HIRTA
ACTION 5	<i>Develop and implement plans and policies that support adoption of zero emission technology.</i>	HIRTA
ACTION 6	<i>Create implementation plan for pilot projects that can be used to demonstrate the role of zero emission vehicle technology</i>	HIRTA
ACTION 7		HIRTA/MPO/CIRTPA
ACTION 8		HIRTA
ACTION 9	<i>Identify impacts to disadvantaged communities who rely upon HIRTA.</i>	HIRTA/MPO/CIRTPA
ACTION 10	<i>Maintain active role on relevant climate adaptation working groups and committees</i>	HIRTA
ACTION 11		HIRTA
ACTION 12	<i>Increase the ability of HIRTA staff to access and interpret climate change information including relevant data and maps.</i>	HIRTA/MPO/CIRTPA