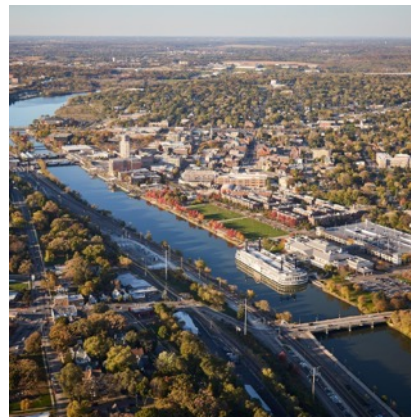
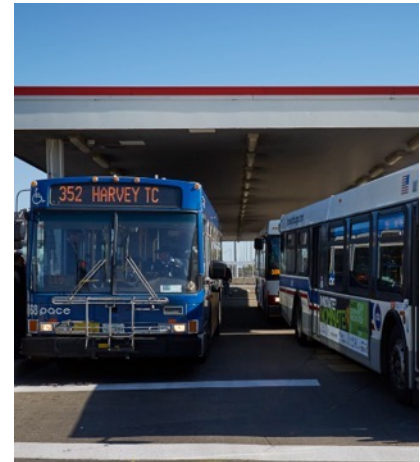
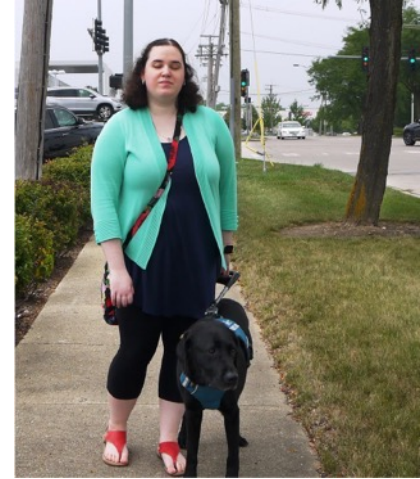


# Collaborating on regional climate action planning

**Nora Beck**

**Program Lead for Air Quality and Water Resources**

**May 16, 2023**



# Agenda

ON TO 2050 and context

Framework for climate action planning

# ON TO 2050 and context

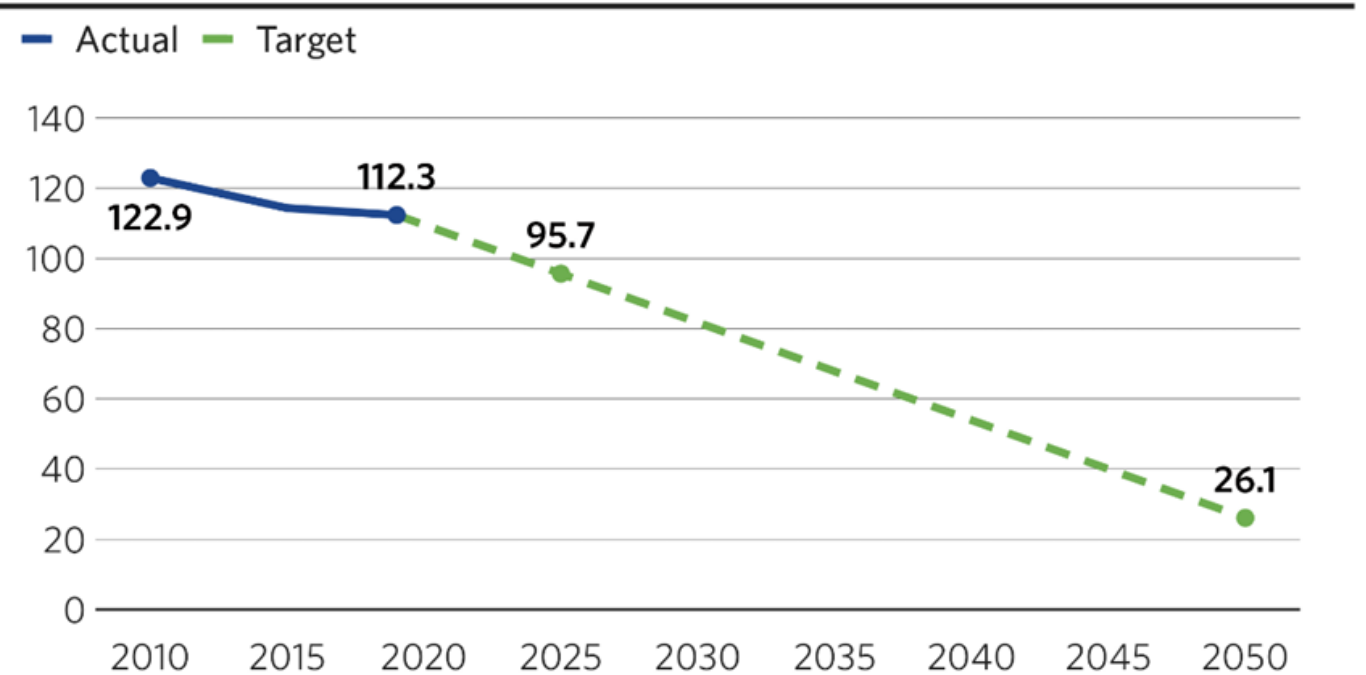
# ON TO 2050: Intensify Climate Mitigation

## Strategies

- Comprehensively address energy and climate change at the federal and state levels.
- Transform transportation systems to reduce emissions.
- Increase low- and zero-emissions energy generation

*Adopted target: 80% below 2005 levels by 2050*

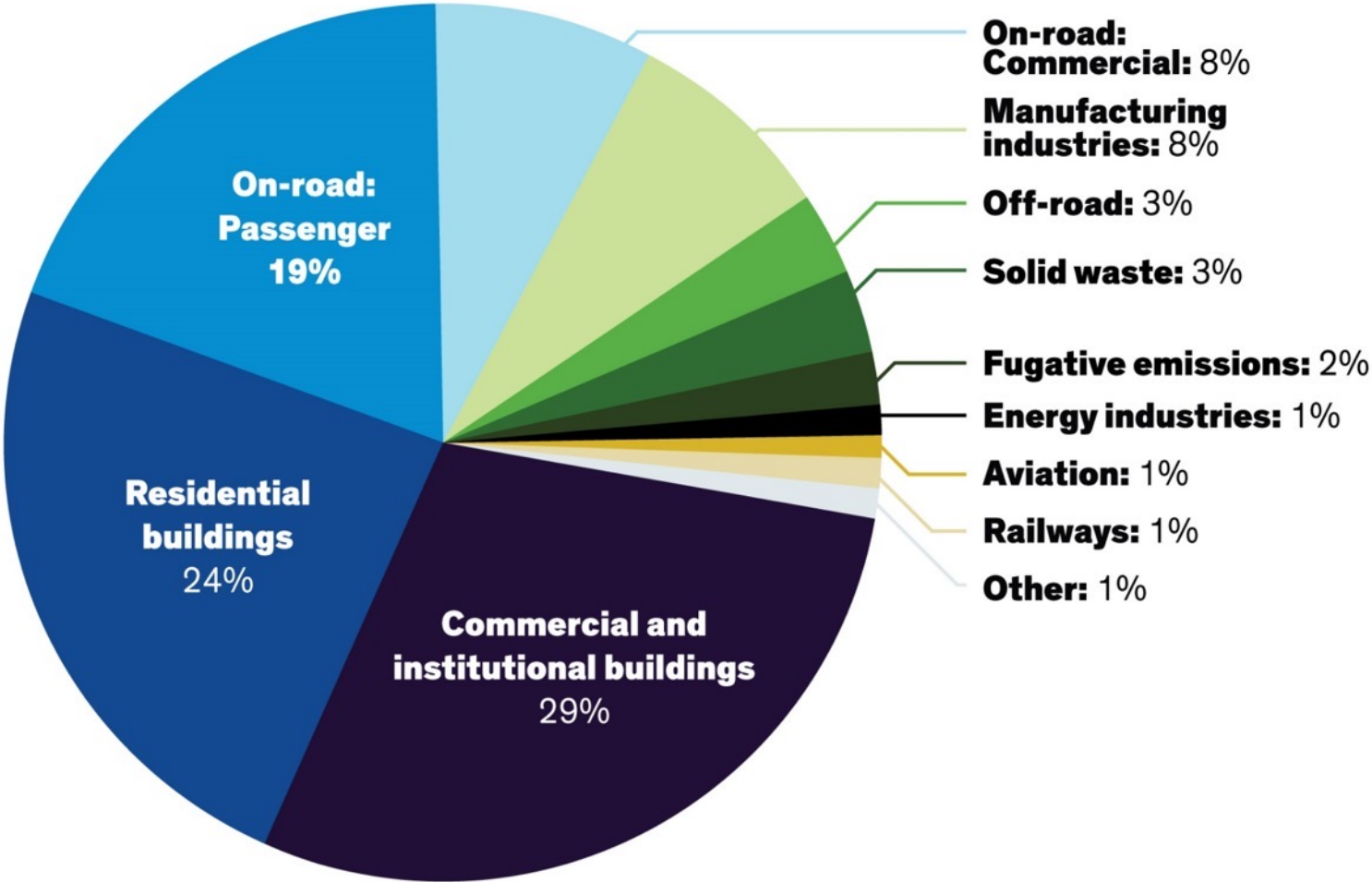
Greenhouse gas emissions (MMT $\text{CO}_2\text{e}$ )



Source: CMAP ON TO 2050, Indicators Appendix

# Regional GHG emissions inventory

- Greenhouse gas (GHG) emissions for all seven counties
- 2010, 2015, and 2019
- Local summaries for every community



2019 greenhouse gas emissions by subsector

# Buffalo Grove

## 2019 municipal emissions summary

This local emissions summary was developed as part of the 2019 greenhouse gas emissions inventory for northeastern Illinois. The summary is not an exhaustive inventory but captures greenhouse gas emissions from most major sources. It is intended to help decision makers understand key emissions sources and provide communities with the information needed to begin developing emissions reduction plans. For more details on the methods and data sources used to prepare the summary, please refer to the [local emissions summaries methodology](#).

## Community characteristics

Population	43,212
Jobs (full- and part-time)	16,242
Median household income	\$115,951
Share of owner-occupied housing units	80%
Land area (acres)	6,096
Tree coverage*	27%
Impervious surfaces*	49%
Greenest region compact member	Yes

\*percent of land area

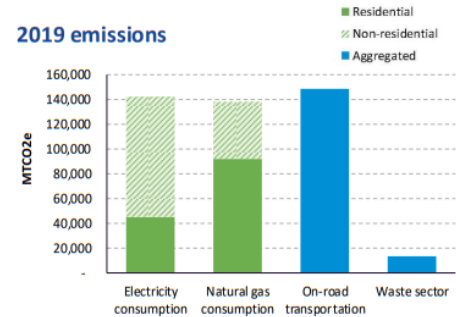
## Emissions summary

### 2019 emissions summary (MTCO<sub>2</sub>e)

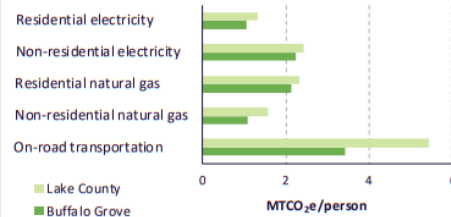
Residential electricity	45,231
Non-residential electricity	97,394
Residential natural gas	92,215
Non-residential natural gas	46,290
On-road transportation	148,561
Waste sector	13,179

MTCO<sub>2</sub>e = metric tons of carbon dioxide equivalent

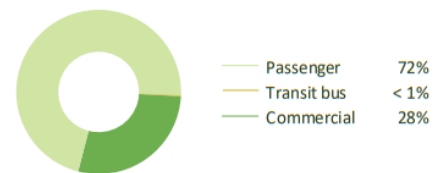
### 2019 emissions



### 2019 per capita emissions



### On-road transportation emissions breakout



January 2023 release

## Energy characteristics



### 2019 energy consumption

Residential electricity (kWh)	116,266,294
Non-residential electricity (kWh)	250,348,230
Residential natural gas (MMBtu)	1,736,153
Non-residential natural gas (MMBtu)	871,511

kWh = kilowatt hours; MMBtu = million British thermal unit

### Renewable energy information

Solar potential (megawatts)	215
SolSmart designation	NA

Data not available for all municipalities

### 2019 per capita energy consumption

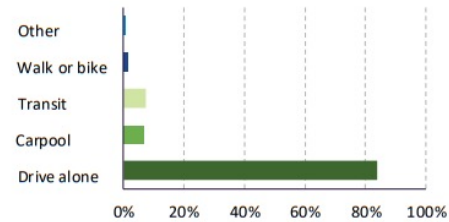
	Buffalo Grove	Lake County	CMAP Region
Residential electricity (kWh/person)	2,691	3,387	2,844
Non-residential electricity (kWh/person)	5,793	6,258	7,279
Residential natural gas (MMBtu/person)	40	44	38
Non-residential natural gas (MMBtu/person)	20	29	38

kWh = kilowatt hours; MMBtu = million British thermal unit

## Transportation characteristics



### Mode of travel to work

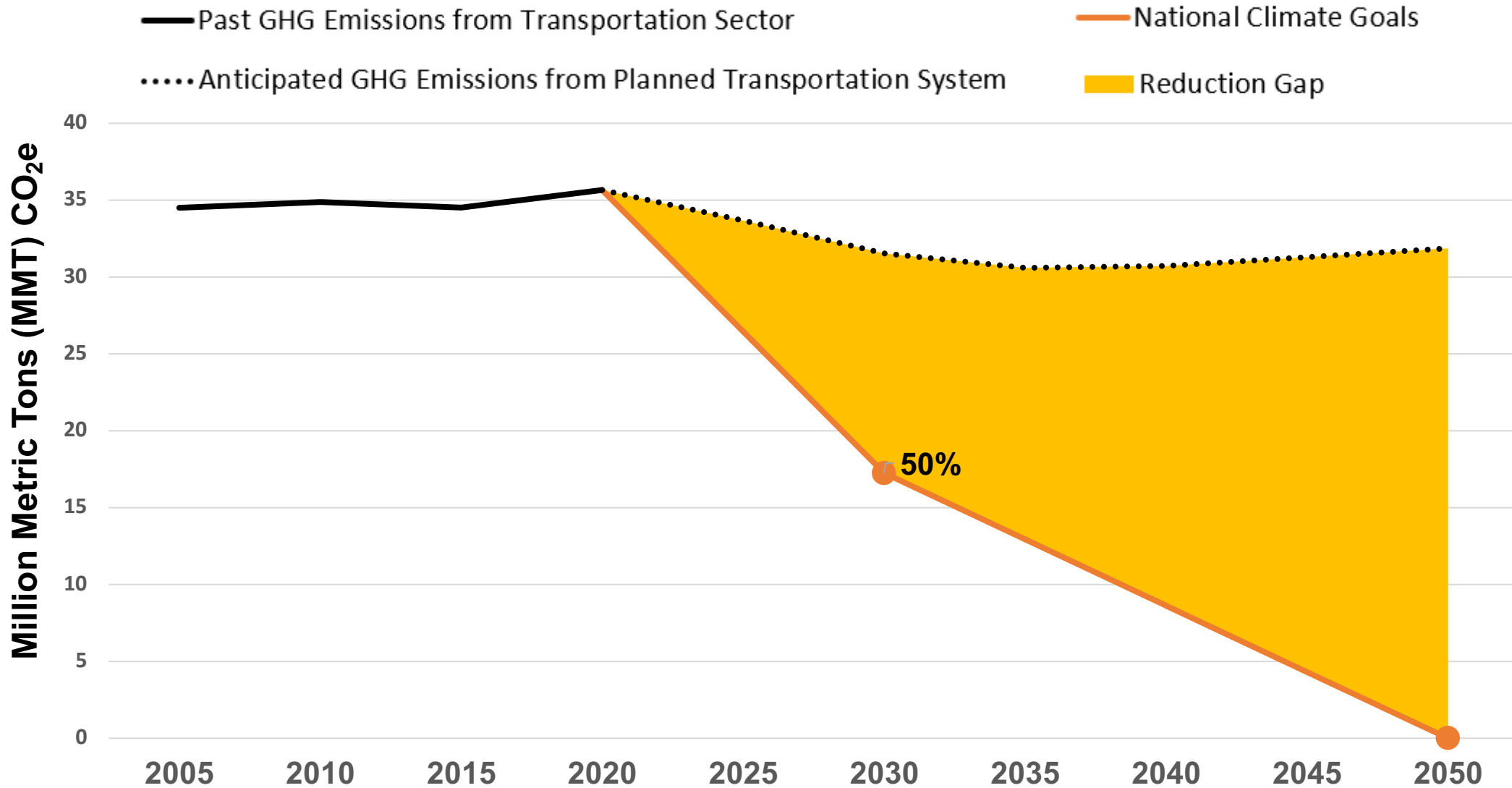


### Transportation details

	Buffalo Grove	Lake County	CMAP Region
Vehicles per household	2.0	2.6	2.0
Electric vehicles (% of passenger vehicles)	0.4%	0.4%	0.2%
Share of residents with at least moderate walkability	54%	33%	64%
Share of residents with at least moderate transit access	48%	48%	74%
Residential vehicle miles traveled (per household)	19,538	22,231	17,165

Data are not available for all municipalities

# Potential USDOT GHG Measure



Source: CMAP 2019 GHG Inventory and Spring 2022 Conformity Run

# Framework for regional climate action planning



# Design objectives

- Build on existing work and harness partner subject matter expertise.
- Given short timeline, make strategic updates.
- Position the region to be competitive for implementation funds.

**Priority Climate  
Action Plan**

**DUE MARCH 2024**

**Comprehensive Climate Action Plan**

**DUE SUMMER 2025**

**Status Report**

**DUE SUMMER 2027**

*IMPLEMENTATION*

**USEPA CPRG PHASE 2**

Summer 2023    Fall    Winter    Spring 2024    Summer    Fall    Winter    Spring 2025    Summer    Fall    Winter    Spring 2026    Summer    Fall    Winter    Spring 2027    Summer

**Update Caucus' CAP:**

- 2019 GHG Inventory
- Prioritize most effective strategies
- Low Income/Disadvantaged communities benefits analysis
- Review authority to implement

**Priority Climate Action Plan**

DUE MARCH 2024

**Comprehensive Climate Action Plan**

DUE SUMMER 2025

**Status Report**

DUE SUMMER 2027

*IMPLEMENTATION*

USEPA CPRG PHASE 2

Summer 2023    Fall    Winter    Spring 2024    Summer    Fall    Winter    Spring 2025    Summer    Fall    Winter    Spring 2026    Summer    Fall    Winter    Spring 2027    Summer

**Expand:**

- Include additional sources and sinks
- Update quantified reduction measures, projections, and targets
- Conduct benefits analysis, update low income/disadvantaged communities
- Workforce planning analysis
- Identify other funding available

**Priority Climate  
Action Plan**

DUE MARCH 2024

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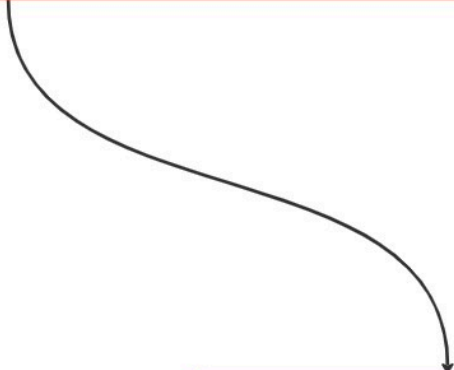
*IMPLEMENTATION*

USEPA CPRG PHASE 2

Summer 2023    Fall    Winter    Spring 2024    Summer    Fall    Winter    Spring 2025    Summer    Fall    Winter    Spring 2026    Summer    Fall    Winter    Spring 2027    Summer

**Report out on progress**

- Use upcoming 2025 GHG inventory
- Update quantified reduction measures, projections
- Update authority to implement



**Priority Climate Action Plan**

DUE MARCH 2024

**Comprehensive Climate Action Plan**

DUE SUMMER 2025

**Status Report**

DUE SUMMER 2027

*IMPLEMENTATION*

USEPA CPRG PHASE 2

Summer 2023    Fall    Winter    Spring 2024    Summer    Fall    Winter    Spring 2025    Summer    Fall    Winter    Spring 2026    Summer    Fall    Winter    Spring 2027    Summer

# Discussion questions

Are there actions at the county and state could take that would assist municipal implementation of CAP strategies?

What have been other opportunities or barriers to implementing strategies?