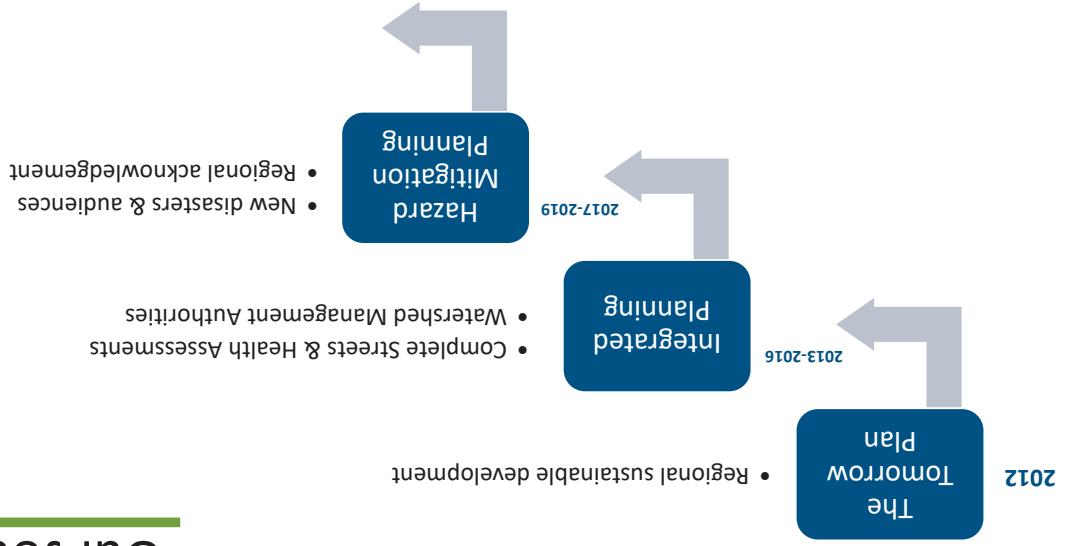


CLIMATE PLANNING @ DES MOINES AREA MPO

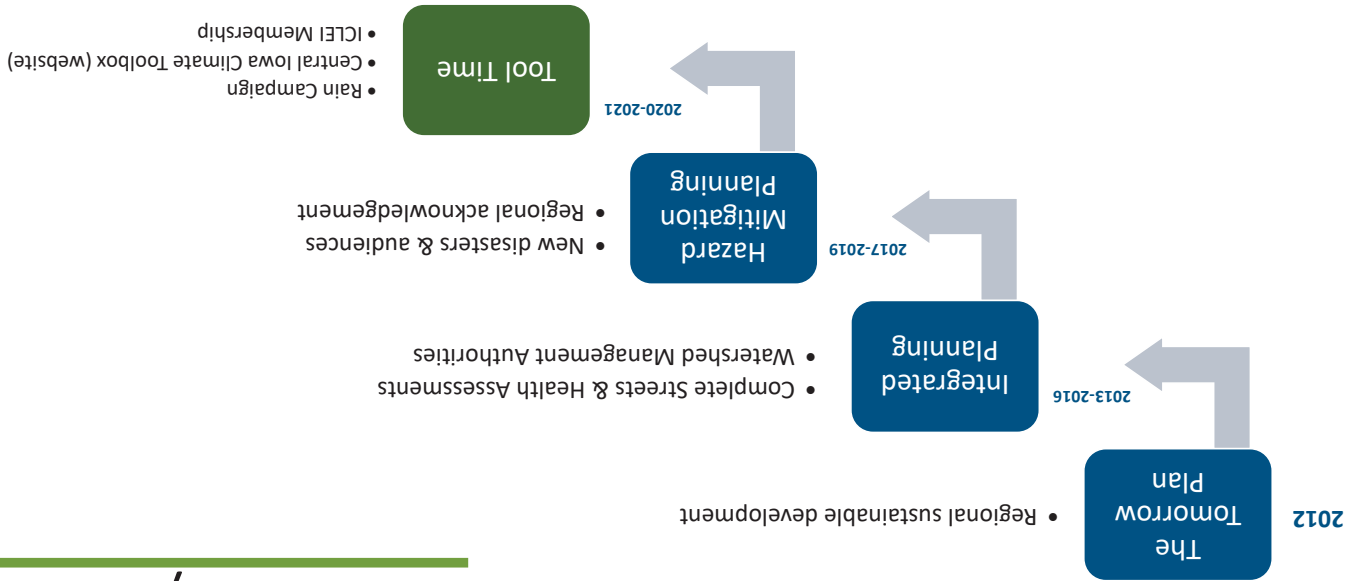
IA DOT MPO/RPA Quarterly Meeting – March 2023



Our Journey Here



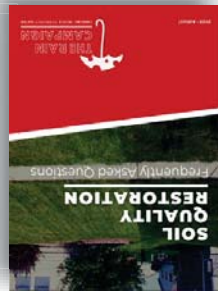
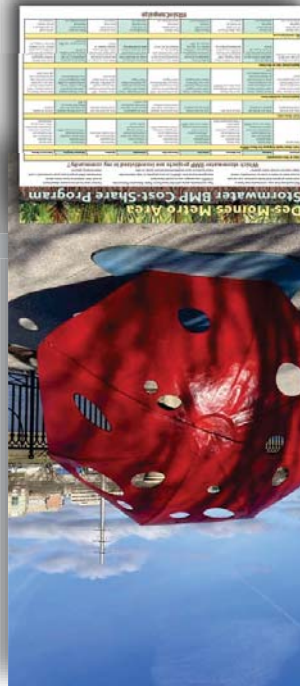
Our Journey Here



June 30, 2018

WHAT ELSE YA GOT?

Oh, that made it easier...

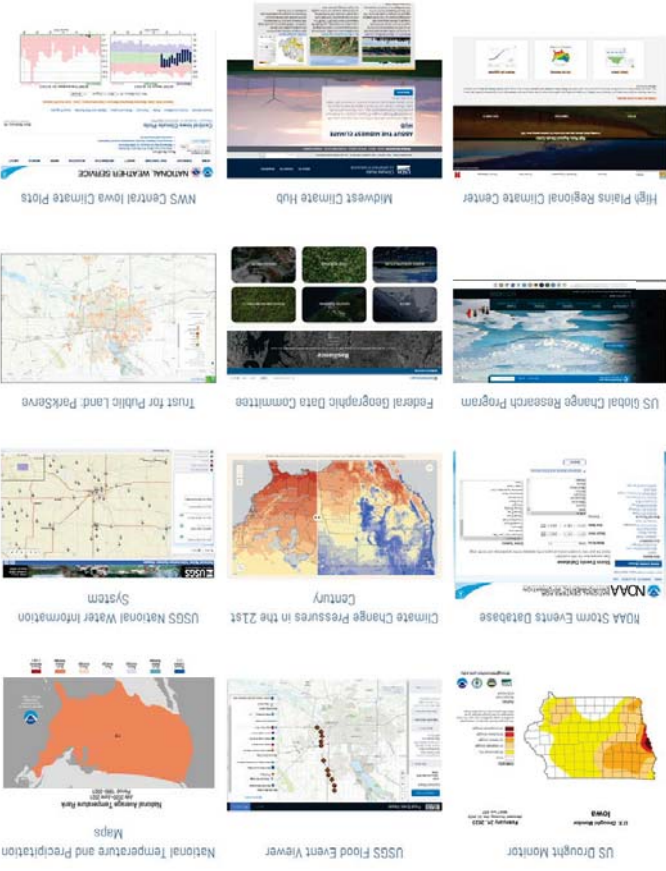


Pivoting to Climate

- Communities getting stuck before even starting
- *Gaps identified:*
 - Break down the big to basics
 - MIDWEST resources
 - Home for regional climate “work”
 - Technical staff assistance
 - Show, not tell



Central Iowa Climate Toolbox





- Global consortium of governments and partners working on sustainability issues.
- Through Regional Affiliate membership:
 - Gain access to GHG tools & technical assistance
 - Remove technical barrier
 - Provide data to cities
 - Encourage cohesiveness of regional data
 - Connect region with network, resources, and trainings*
 - Save region of up to \$15,000 annually on individual fees
 - Ready region for infrastructure funding
 - Incorporate findings into MPO short- & long-range planning

ICLEI – Local Governments for Sustainability



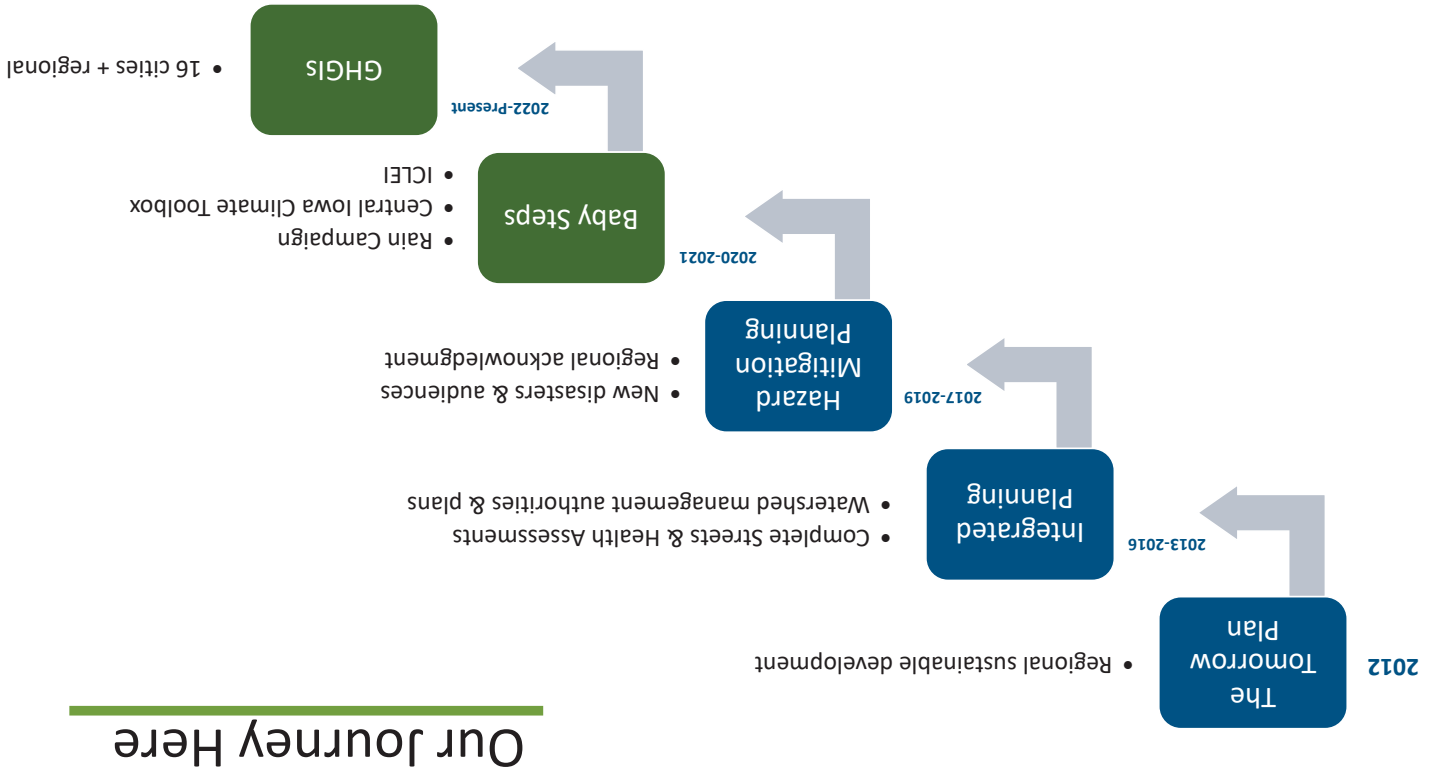
- Some jurisdictions set reduction goals...
 - Wait, what?? They don't have an inventory?
- ~\$3,000-15,000 barrier
- *Gap identified:* GHG inventories

Uncharted Territory



Des Moines Metro 2019 GHGIS

- Parameters
 - Community-wide inventories for MPO Members
 - Sectors: Energy, Transportation, Water & Wastewater, Solid Waste
 - #2020
- Chose to acquire data directly
 - Takes longer, but more accurate
 - “Hello, is anybody out there? Just nod if you can hear me.”
 - Estimated options (Grid, EPA Moves, Google Etc...)
 - Staff time & new data request – cost?
 - New connections & partners
- Emissions factors
 - National/regional defaults & manual adjustments





Sector	CO ₂ Emissions (MT)	% of CO ₂ Emissions
Transportation & Mobile Sources	38,984	26.0%
Commercial Energy	81,562	18.8%
Industrial Energy	70,276	6.7%
Residential Energy	77,664	49.2%
Total	158,500	100.0%

2019 Greenhouse Gas Emissions Breakdown by Sector

City of Waukee



Sector	CO ₂ Emissions (MT)	% of CO ₂ Emissions
Transportation & Mobile Sources	43,437	44.3%
Commercial Energy	22,190	22.6%
Industrial Energy	6,716	6.9%
Residential Energy	25,679	26.2%
Total	98,011	100.0%

2019 Greenhouse Gas Emissions Breakdown by Sector

City of Pleasant Hill



Sector	CO ₂ Emissions (MT)	% of CO ₂ Emissions
Transportation & Mobile Sources	186,371	25.2%
Commercial Energy	111,443	15.0%
Industrial Energy	246,509	33.1%
Residential Energy	158,588	21.8%
Total	742,911	100.0%

2019 Greenhouse Gas Emissions Breakdown by Sector

City of Ankeny

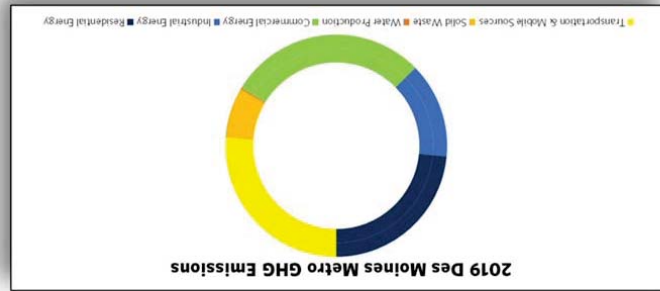


Figure 1: 2019 Des Moines Metro Greenhouse Gas Emissions

Sector	CO ₂ Emissions (MT)	% of CO ₂ Emissions
Transportation & Mobile Sources	1,540,810	26.1%
Solid Waste	435,143	7.4%
Water Production	12,005	0.2%
Commercial Energy	1,707,038	28.9%
Industrial Energy	819,709	13.9%
Residential Energy	1,384,174	23.5%
Total	5,898,879	100.0%

Table 1: CY2019 Des Moines Metro Greenhouse Gas Emissions



- Lessons & limits
 - An ode to organizational skills
 - Some regional data "can't" be parsed - yet.
 - But some can, and you get to do it!
 - Refine between report cycles
 - Data assumptions and gaps
 - VMT & fuels
 - Private utilities
 - Unincorporated areas
 - No per capita/household statistics provided
 - Imperfect
 - Can't account for everything
 - Interstate complaints
 - More gaps identified

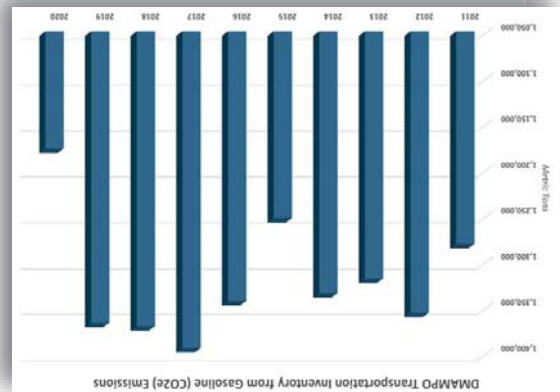
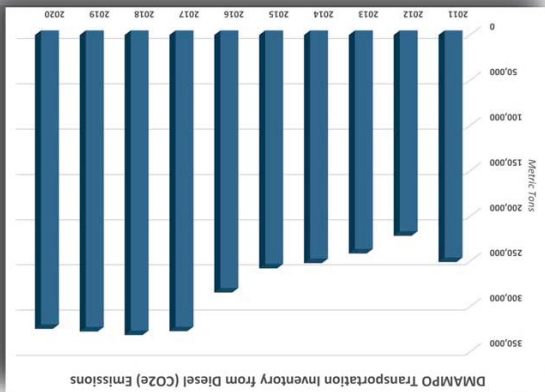
Des Moines Metro 2019 GHGIS

Table III: Street Classification as Percent of Vehicle Miles Traveled (VMT)

Street Classification	% of Total VMT
Interstates	31.9%
Primary Streets	20.1%
Local Streets	48.0%
Total	100.0%

Table II: Vehicle Class as Percent of Vehicles Miles Traveled (VMT)

Vehicle Class	% Total VMT
Class 1 (Motorcycles)	0.2%
Class 2 (Passenger Vehicles)	66.2%
Class 3 (Trucks)	23.9%
Class 4 (Buses)	0.5%
Class 5-13 (Heavy Trucks and Other Vehicles)	9.1%
Total	100.0%



Altoona • Ankeny • Bondurant • Carlisle • Clive • Dallas County • Des Moines • DART • Grimes • Johnston • Mitchellville • Norwalk • Pleasant Hill • Polk County • Polk City • Urbandale • Warren County • Waukee • West Des Moines • Windsor Heights

THANK YOU

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