
Austin Environmental Commission

Carbon Emissions and

Air Quality Impacts



OFFICE OF
SUSTAINABILITY

CITY OF AUSTIN

February 19, 2020

Carbon Impact Statement



Austin

COMMUNITY
2015
CLIMATE PLAN

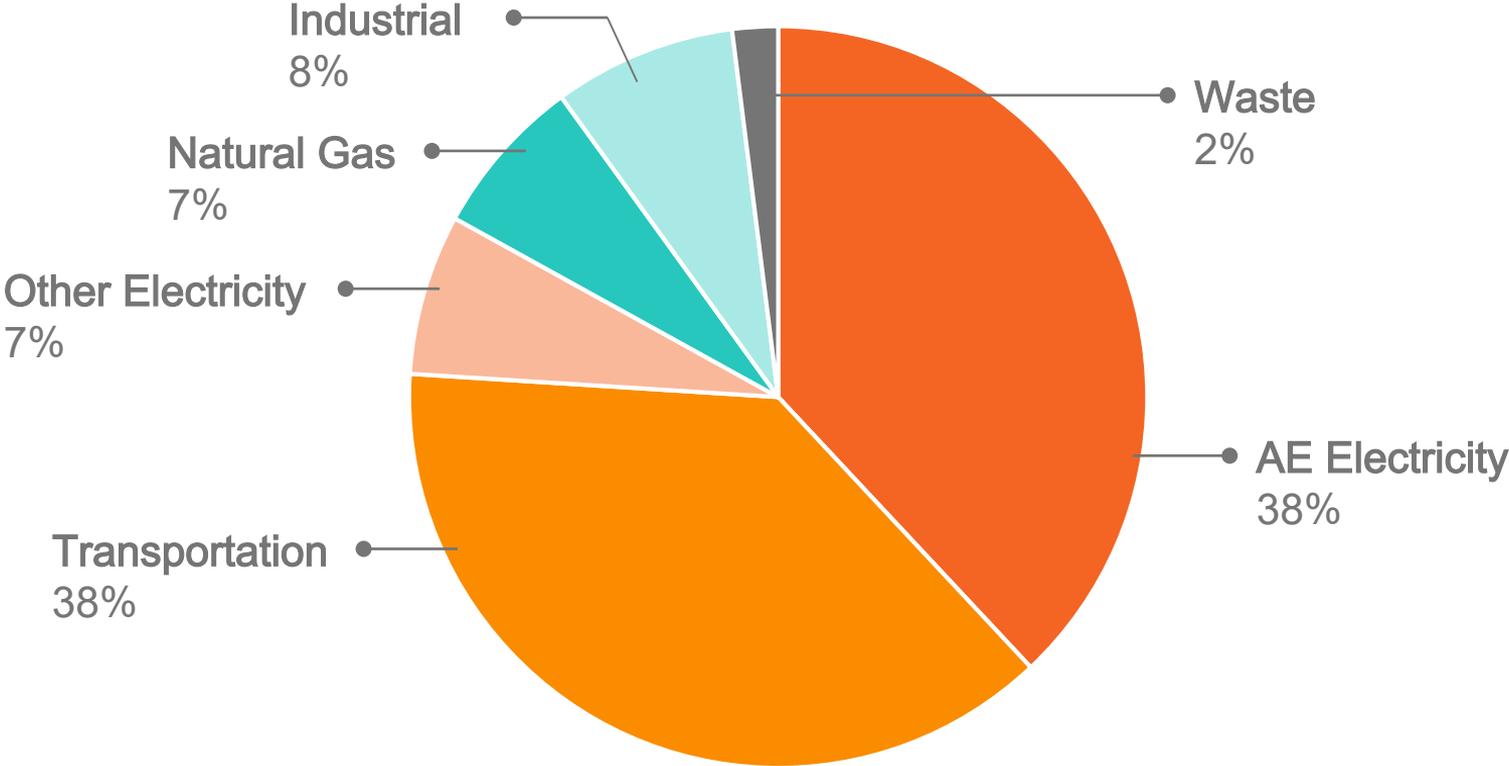
2015 Climate Plan

Net-Zero community-wide greenhouse gas (GHG) emissions by 2050.

Currently being updated.



2018 Austin Community Climate Footprint



12.8 million metric tons CO₂e

Carbon Impact of New Development

WHERE development happens:

- near transit and alternative mobility options,
- in IA Activity Centers and Corridors;

HOW development is designed:

- energy efficient buildings,
- on-site renewable energy,
- efficient land use and connectivity,
- a mix of uses, and
- adaptive reuse of existing buildings.



Carbon Impact Checklist Tool

Scoring Guide:

1-4: Business as usual

5-8: Some positive actions

9-12: Demonstrated leadership



Carbon Impact Checklist Tool

TRANSPORTATION

- Bicycle Transit Connectivity
- Bicycle Infrastructure
- Walkability
- Utilize TDM Strategies
- Electric Vehicle Charging
- Maximize Parking Reductions



Carbon Impact Checklist Tool

LAND USE

- Imagine Austin Activity Center or Corridor
- Floor -to -Area Ratio (FAR)



Carbon Impact Checklist Tool

WATER + ENERGY

- On-site Renewable Energy
- Reclaimed Water



Carbon Impact Checklist Tool

FOOD and MATERIALS

- Access to Food
- Adaptive Reuse



Projects Submitted to Date

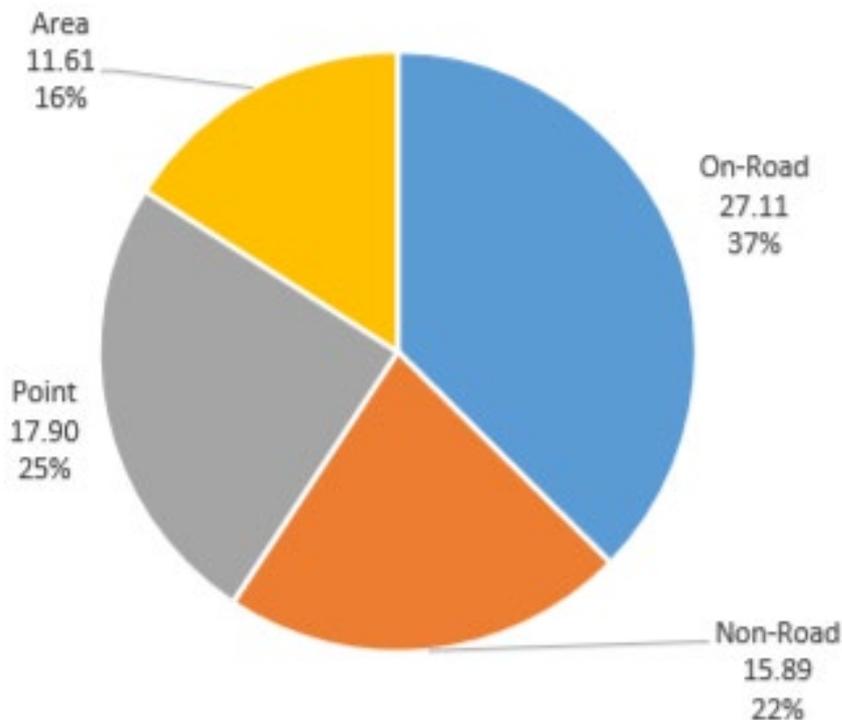
Project Name	Project Total CIS Score
Holdsworth Center	7
425 W. Riverside (AKA Snoopy PUD)	9
Goodnight Ranch	10
Austin Green	8
Camelback	8
COTA	7
218 S. Lamar	7
3501 Ed Bluestein (AKA Eightfold/Motorola)	9
305 Congress (AKA Statesman Site)	Not yet Submitted

Air Quality Co-benefits

- 50% of Carbon Impact Statement questions are centered on transportation
- Passengers cars are the largest source of NOx emissions in the Austin+Round Rock-Georgetown MSA
- Sustainable transportations choices have the biggest air quality impact on NOx/ ground-level ozone

2018 O3 Season Weekday NOx Emissions for Austin-Round Rock-Georgetown MSA

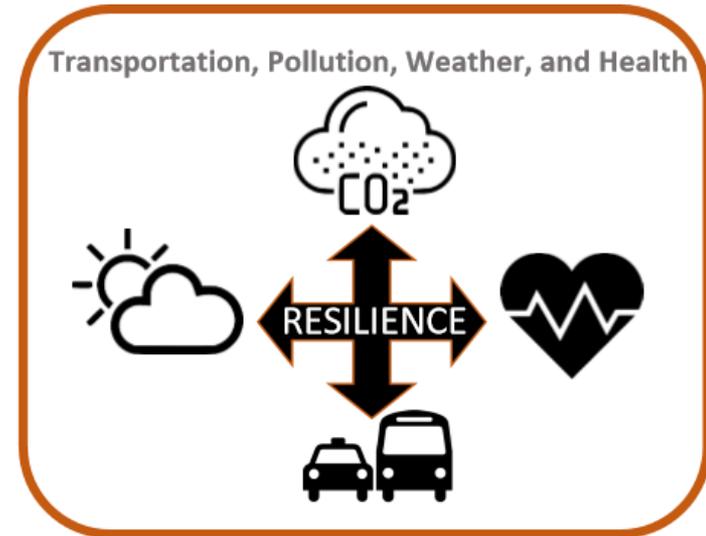
Total = 72.51 tpd NO_x Emissions



Air Quality Updates

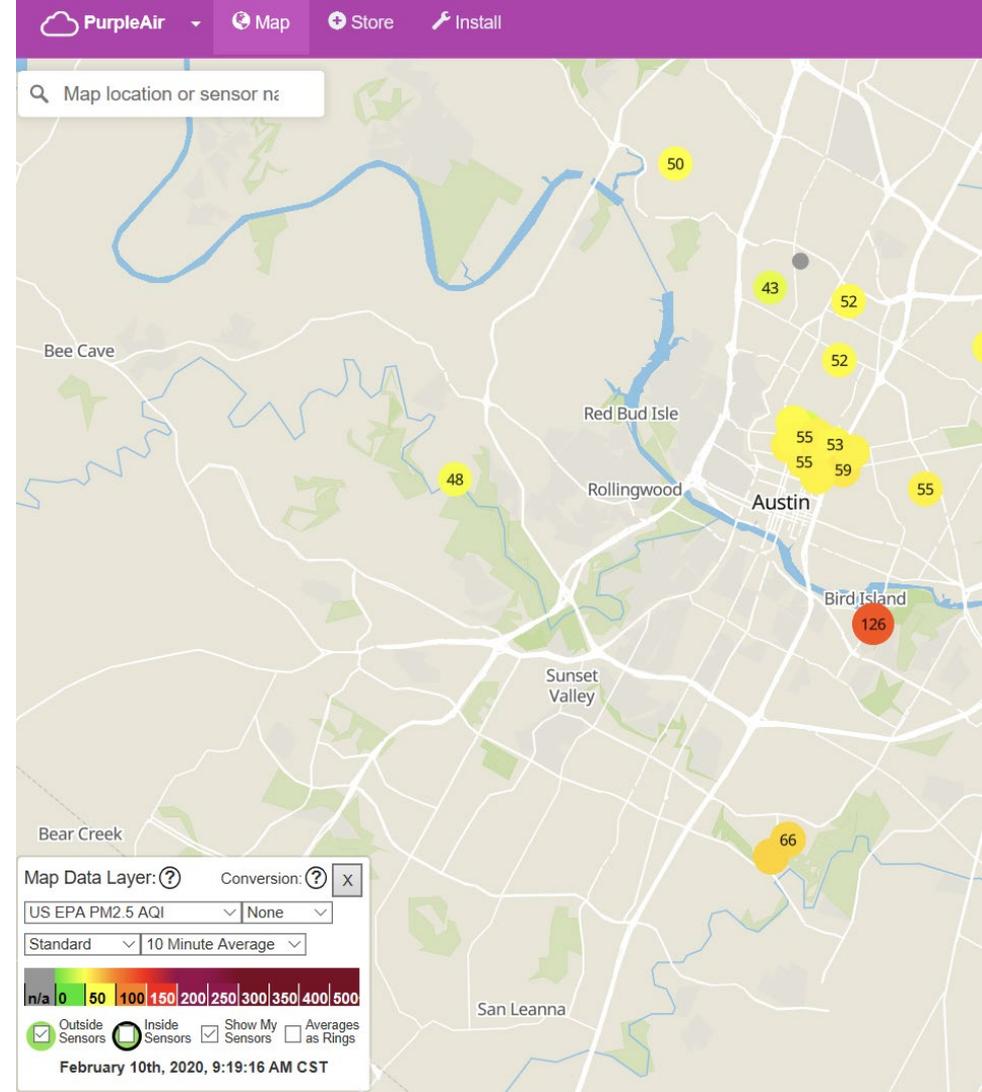
Hack for Resilient Communities

- Hosted by UT Center for Transportation Research on Saturday, **February 29th** from **10:30AM -7:30PM**
- Call for all participants of all discipline levels to help design and implement software tools to **improve community resiliency** using real Austin transportation, pollution, weather and health data



Localized Monitoring

- PurpleAir sensors, which measure particulate matter, are used to help provide a real-time air quality monitoring network
- A couple of sensors were installed by the UT Center for Transportation Research in the Dove Springs neighborhood for Hackathon event analysis
- Several are installed throughout the city by different people or organizations, and the data is publicly available



Special Events Ordinance Emissions Management Plan

- Encourages minimizing generator usage, properly sizing generators, and avoiding locating generators near air intake locations of nearby buildings
- Encourages specification of battery electric equipment first, but natural gas/propane equipment over diesel and gasoline
- Calls for creating clear event policy and education materials to limit vehicle idling for no longer than 5 minutes
- Events affected by this ordinance in our database include: Grand Prix, WGC Dell Technologies Match Play, Austin City Limits

Potential Next Steps...

Update the CIS to
incorporate Air Quality.

Ensure that the CIS tool can
be more **effective.**

Thank you!
