

# NWA NVARPC Energy & **Environment Innovation Plan**

# WELCOME Please sign in

# Northwest Arkansas Regional Planning Commission (NWARPC)

Regional Plan Phases

THIS is what we're working ou right now!

#### PRIORITY ACTION PLAN

#### SEPT 2023 - NOV 2023

- Review existing regional action plans
- Public and stakeholder engagement
- Prepare at least three Priority
   Actions for inclusion in state wide plan

#### COMPREHENSIVE ACTION PLAN

#### MARCH 2024 - FEB 2025

- Public and stakeholder engagement
- Prepare at least three additional Comprehensive Actions for inclusion in state-wide plan

#### STATUS UPDATES

#### **BEGINNING IN 2027**

- Required to report on progress made
- Project updates will be made available to the public

# <sup>9</sup> What is this all about?

U.S.
Environmental
Protection
Agency's (EPA)

Climate Pollution Reduction Grant (CPRG)







### Arkansas Department of Energy and Environment

- Awarded \$3 million planning grant from EPA to create an Arkansas Energy and Environment Innovation Plan
- Plan will make state and local governments eligible for future CPRG Implementation Grants







#### **PURPOSE OF THE PLANNING GRANT**

To ensure targeted investment in energy infrastructure and technologies that **reduce pollutants**, **create high-quality jobs**, and **spur economic growth** in your region and across the state.

#### **OUR ASK OF YOU**

Take the survey so we can understand what kinds of pollutant reduction incentive programs or specific projects you would like us to include both in the state and region-specific plans.

You'll learn more about the survey questions on the following posters.

THIS is what we need your help with!

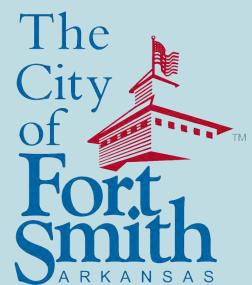
# Northwest Arkansas Regional Planning Commission

- Awarded funding for an NWA regional plan to be included in state-wide plan
- Partners: Arkansas Dept. of Energy
   & Environment, Metroplan, NWA
   Regional Planning Commission, and the
   City of Fort Smith





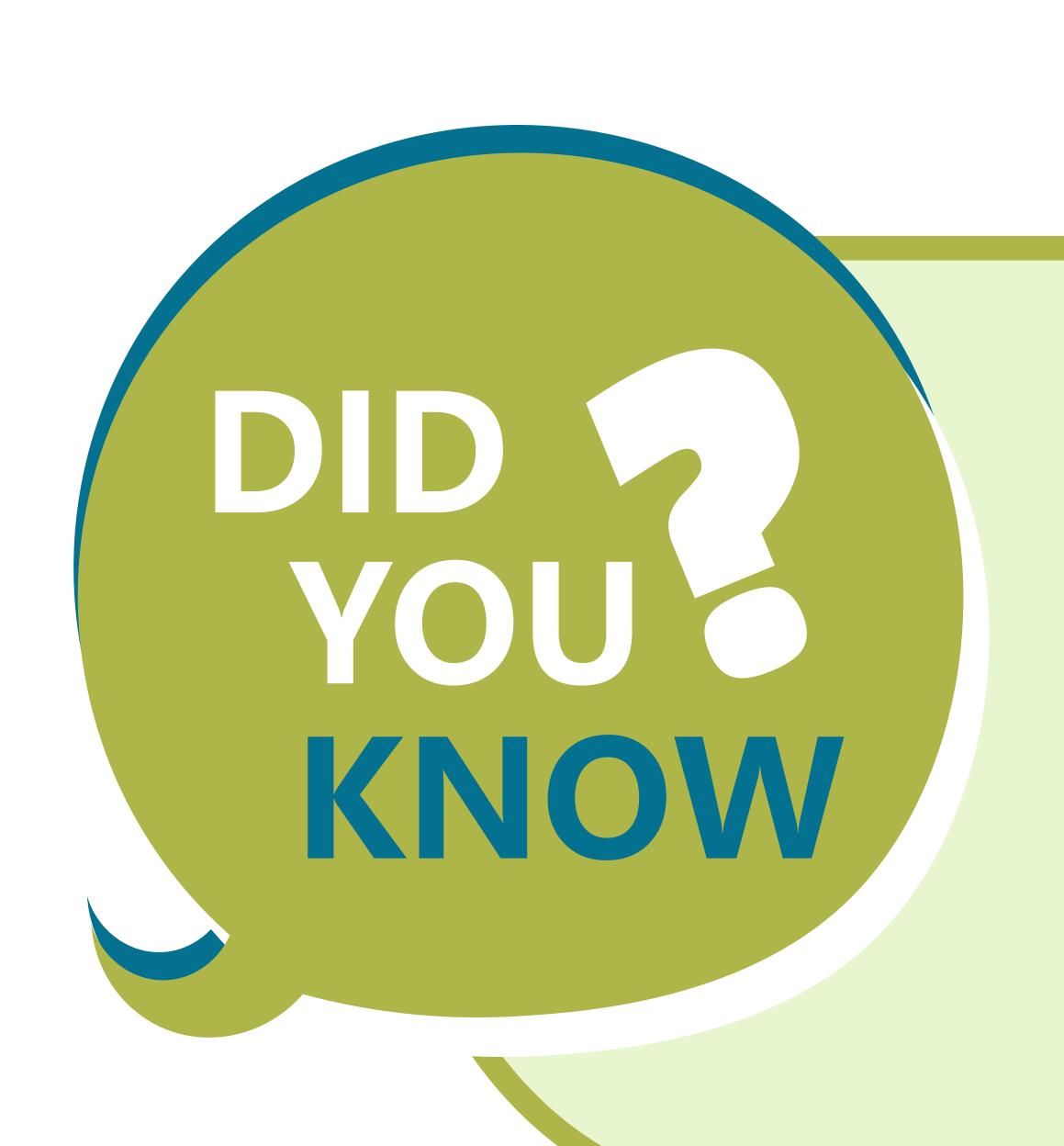




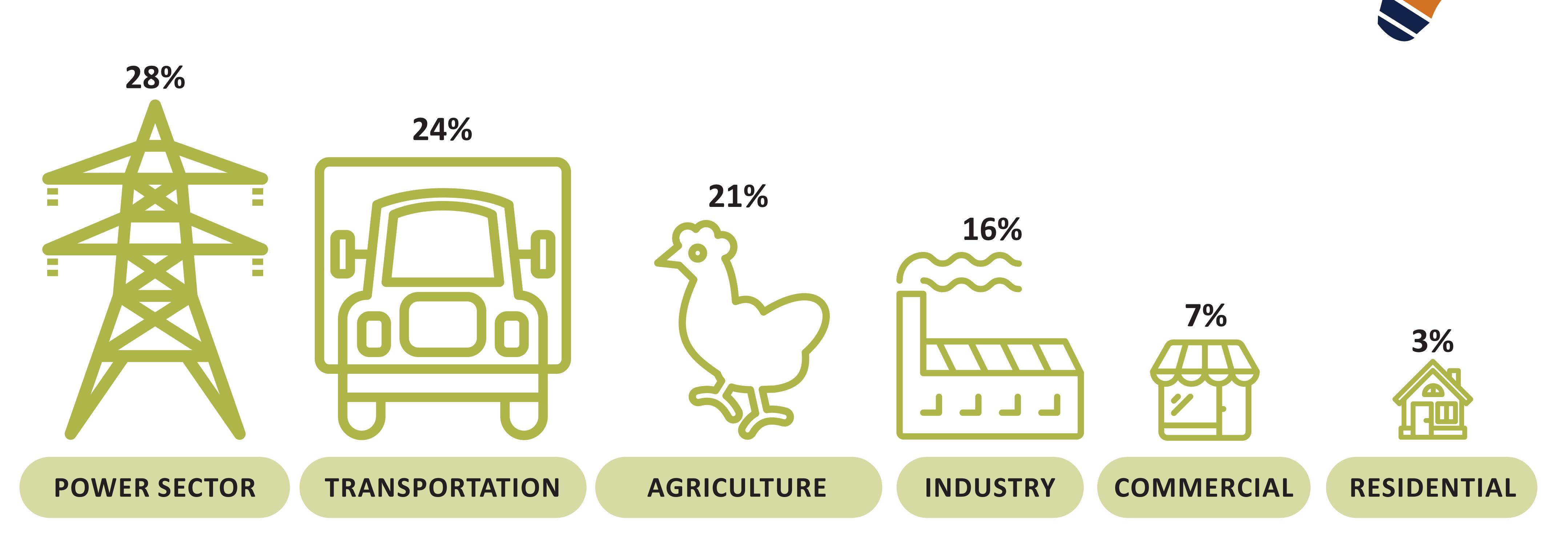








- The power sector is currently the largest contributor to greenhouse gas emissions in Arkansas
- Carbon dioxide makes up 70% of Arkansas greenhouse gas emissions followed by methane (19%), nitrous oxides (10%), and fluorinated gases (3%)



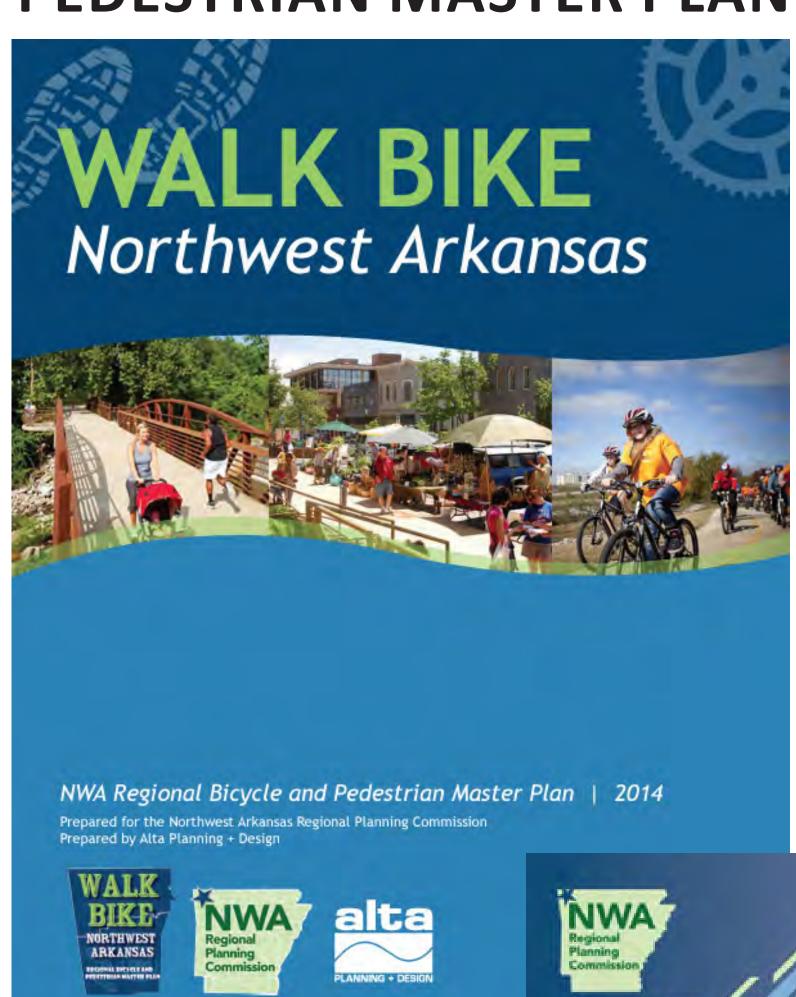


The Northwest Arkansas Regional Planning Commission has been working on pollutant reduction efforts for a long time.

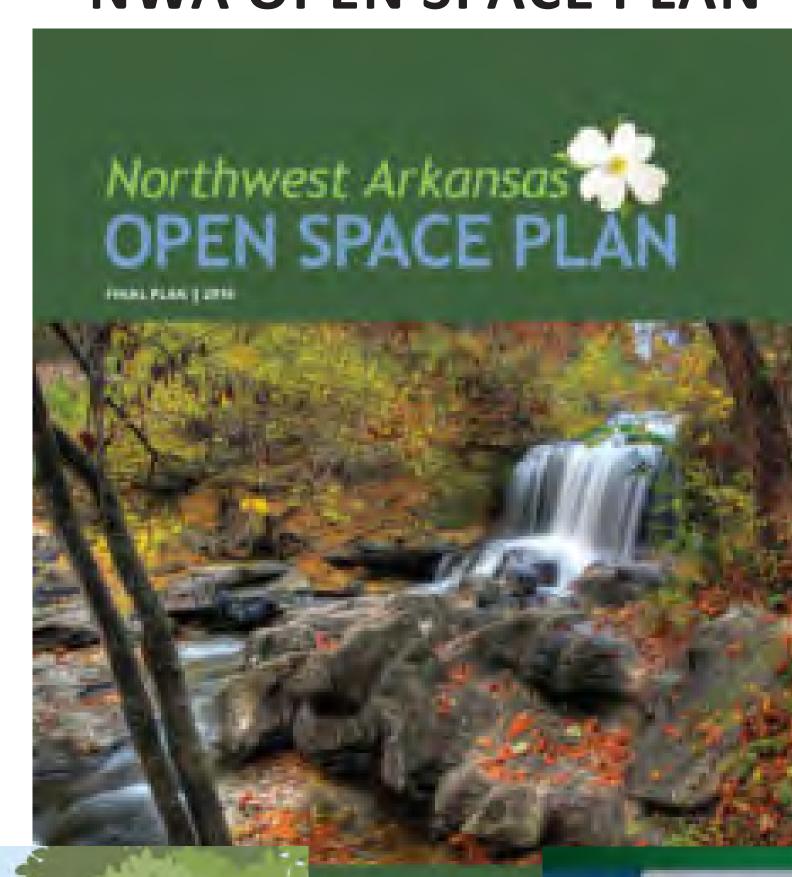
Here are some examples of other projects they've worked on.



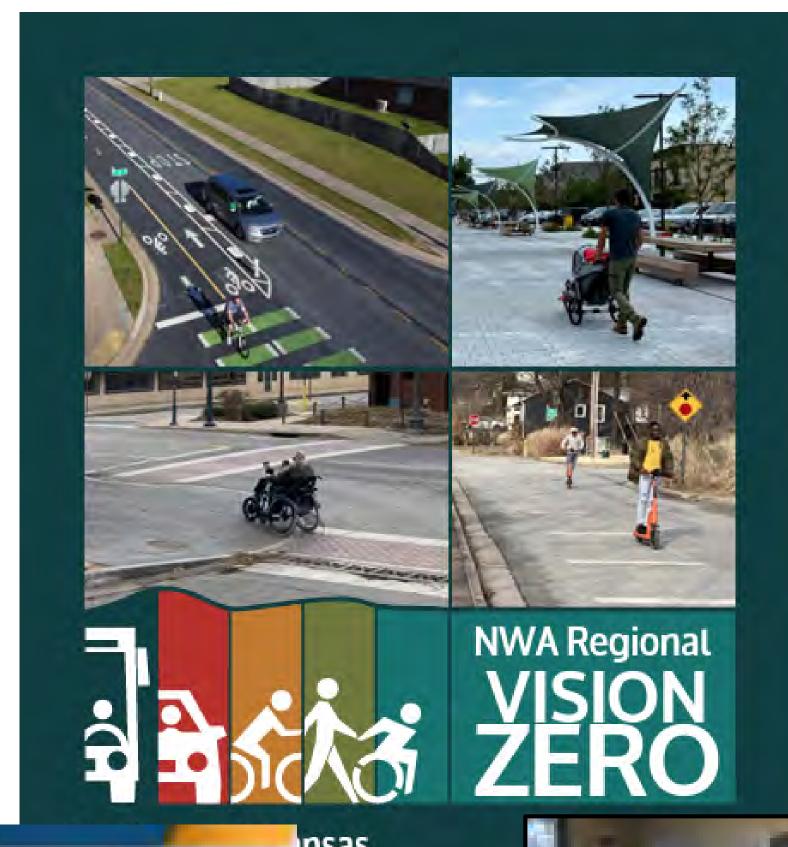
#### NWA BICYCLE AND PEDESTRIAN MASTER PLAN



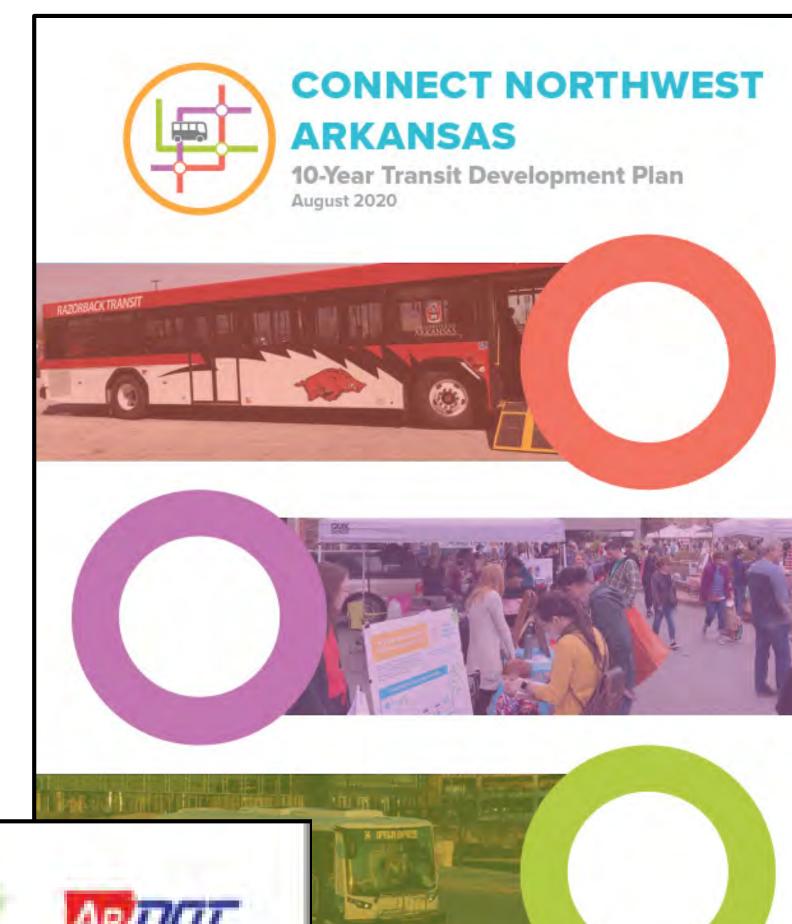
#### NWA OPEN SPACE PLAN

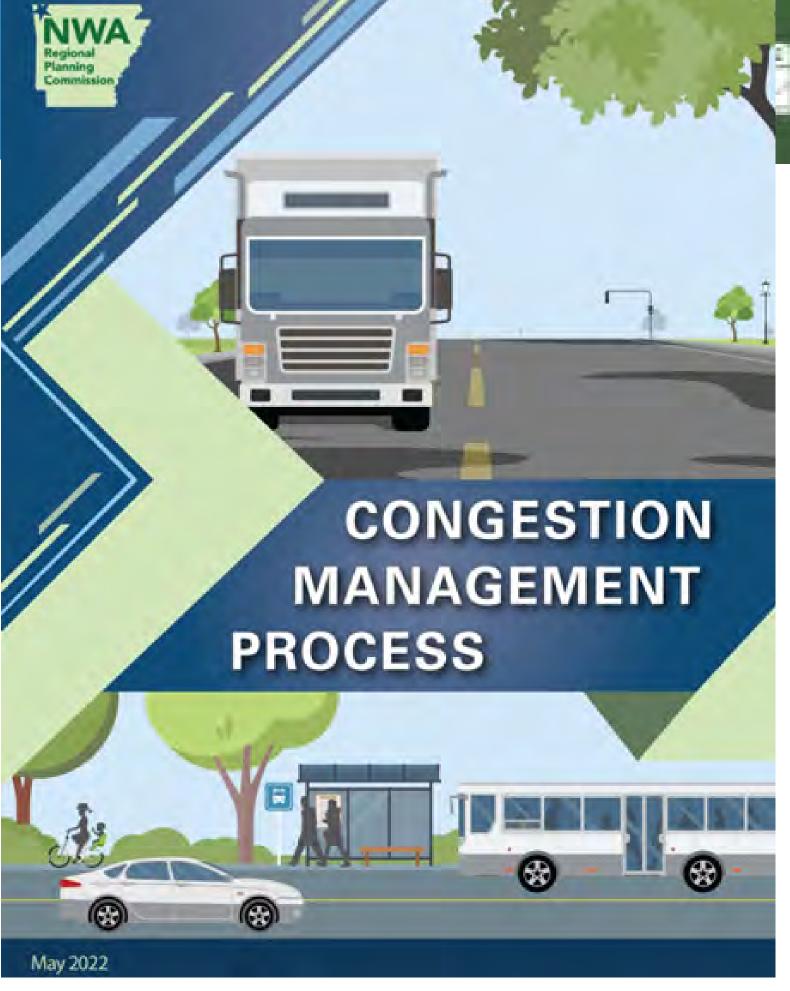


#### NWA VISION ZERO PLAN

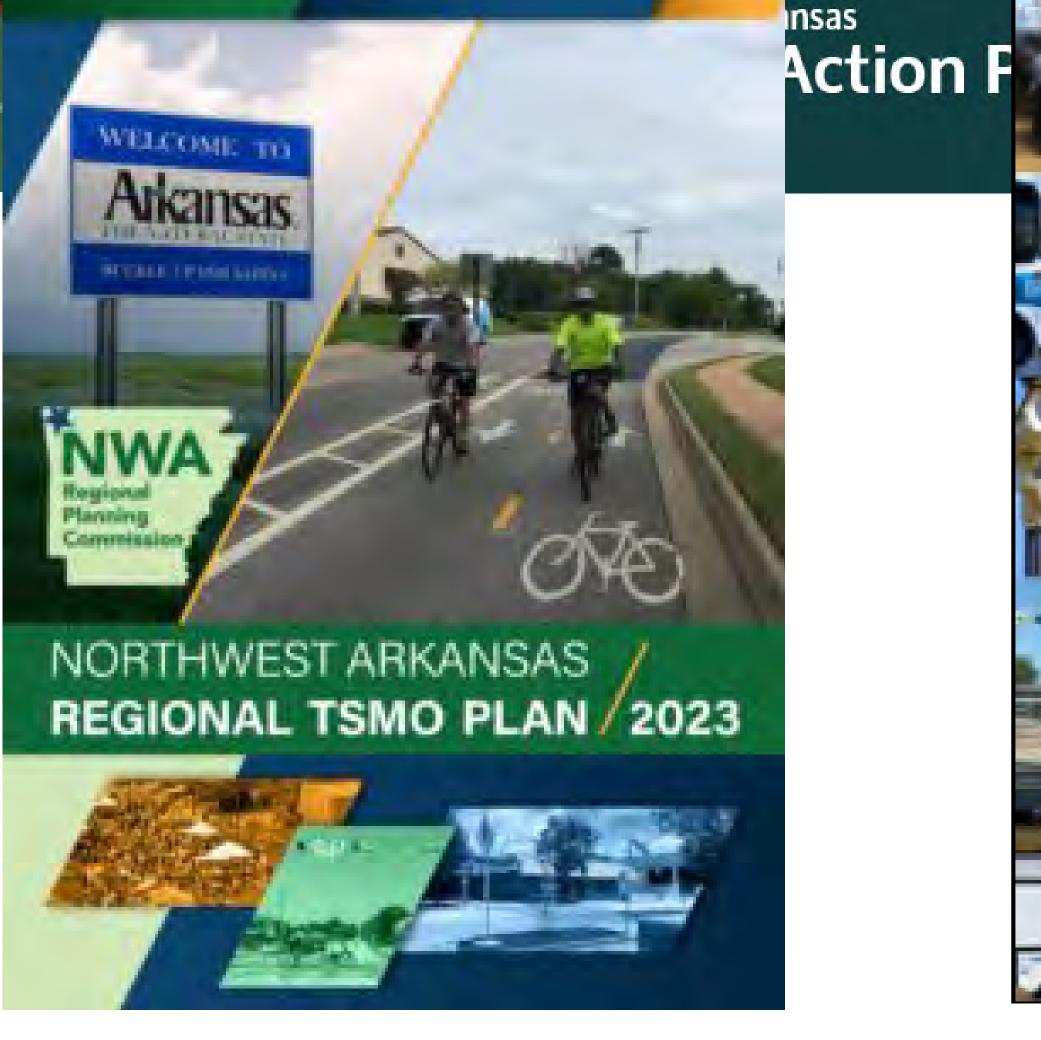


#### **CONNECT NWA**

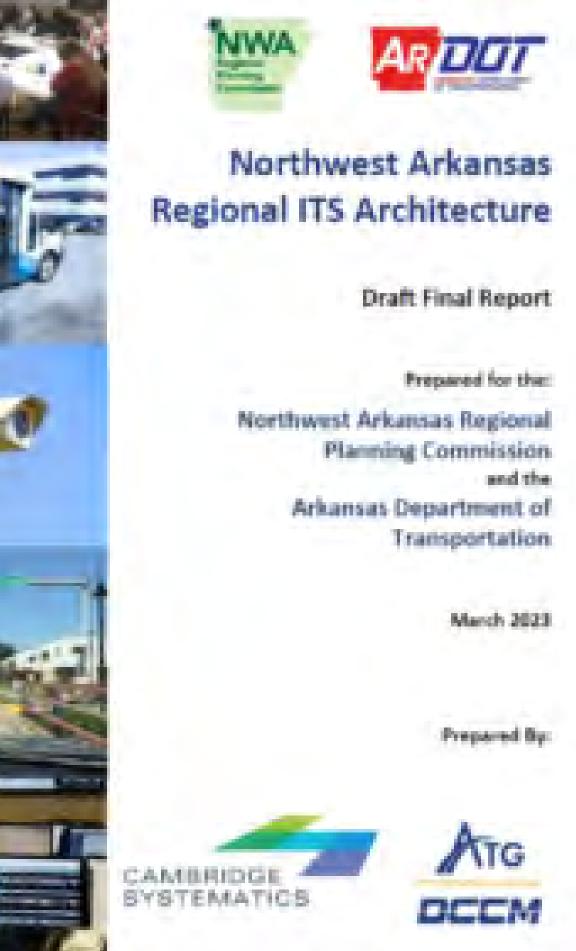




CONGESTION
MANAGEMENT PROCESS



NWA TRANSPORTATION SYSTEMS MANAGEMENT AND OPERATIONS



NWA INTELLIGENT TRANSPORTATION SYSTEM

# It's time to take the survey!

**Take the survey** by scanning the QR code below or pulling up the website listed below and pressing the "Take the Survey" button.

#### ENGLISH / SPANISH



#### MARSHALLESE



You can answer each question by following along with the upcoming posters.

nwarpc.org/energy-environment-innovation-plan

# Reliable Low and Zero-Emissions Energy

Reducing emissions from energy production.



**SMALL-SCALE SOLAR** 

Example: Incentives for solar panels at individual residences and small businesses



**MEDIUM-SCALE SOLAR** 

Example: Incentives and enabling policies for neighborhood/community-scale solar projects and solar panels at large businesses



LARGE-SCALE SOLAR

Example: Incentives for utility-scale solar energy production to supply the power grid



AGRICULTURE AND SOLAR FIELD DEMONSTRATIONS

Example: Incentives for demonstrations that use crop and grazing land for both agriculture and solar energy generation



#### LOW-GREENHOUSE GAS HYDROGEN

Example: Incentives for hydrogen-combustion capable turbines, pipeline infrastructure, hydrogen fueling stations, and facilities that produce hydrogen using renewables or carbon capture



## ELECTRIC GRID UPGRADES NEEDED FOR LOW AND ZERO-EMISSIONS GENERATION SOURCES

Example: Assistance with electric grid interconnection costs for low and zero emissions power generation sources, such as renewables, nuclear, and hydrogen



#### BATTERY STORAGE

Example: Incentives for batteries to store electricity from renewable energy

# Efficiency and Waste Minimization

Making the best use of our resources. Avoiding waste. Doing more with the same amount of (or less) energy and pollution.



#### MATERIALS MANAGEMENT & RECYCLING

Example: Incentives to demonstrate new processes that use or reuse materials more productively and sustainably over their entire life cycles



#### TRANSPORTATION CHOICE

Example: Incentives for transportation infrastructure (roads, transit routes, sidewalks, paths, and trails) that help people more easily choose or transition between options such as walking, biking, transit, and micromobility (e-bikes, e-scooters)



#### **CONNECTED COMMUNITIES**

Example: Local policies and incentives that encourage more compact, walkable, and transit-oriented development



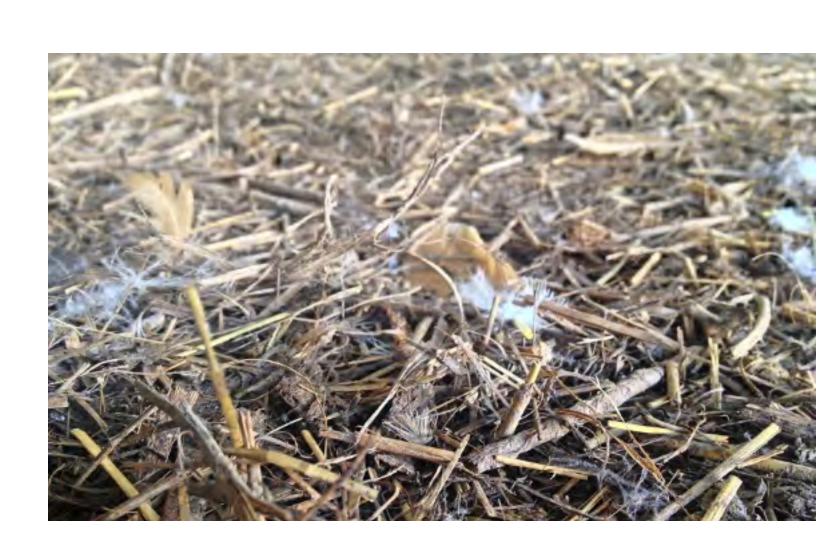
#### **COMPLETE & GREEN STREETS**

Example: Build/retrofit streets to enable safe use and support mobility of all users and to reduce stormwater runoff, improve water quality, and mitigate urban heat island effects



## INTELLIGENT TRANSPORTATION SYSTEMS (ITS) & TRAFFIC MANAGEMENT CENTERS (TMCS)

Example: Incorporate technology (cameras, sensors) into traffic monitoring to reduce emissions by improving driving, parking, delivery, and traffic signal efficiency



#### AGRICULTURAL WASTE

Example: Incentives to treat or capture pollution in manure



#### LANDFILL AND DIGESTER GAS CAPTURE & REUSE

Example: Incentives for equipment needed to capture methane from landfills or farm digesters (big tanks that hold livestock waste) for use in electricity production, heating, and powering heavy-duty vehicles and equipment



#### COMPOSTING

Example: Grants to pilot community-wide compost pickup programs



#### **ENERGY EFFICIENCY**

Example: Incentives for projects that reduce the energy consumed by equipment, appliances, and technologies

### Electrification

Running more things on electricity where it makes sense.



#### PERSONAL ELECTRIC VEHICLES (EVS)

Example: Incentives to reduce upfront barriers to personal electric vehicle ownership (which can include battery, plug-in hybrid, and hydrogen fuel cell vehicles)



#### **ELECTRIC FLEETS AND EQUIPMENT**

Example: Incentives for replacement or retrofit of current bus, truck, train, barge, agricultural, and port equipment with allelectric or fuel cell equivalents



# ELECTRIC VEHICLE SUPPORTING INFRASTRUCTURE

Example: Incentives for electric vehicle charging equipment and electrical upgrades necessary to install charging equipment

As the electricity sector reduces its emissions through installation and operation of low and zero-emission generation, other sectors can reduce their emissions by switching from traditional fuels to electricity.



#### **ELECTRIC APPLIANCES**

Example: Incentives to retrofit existing residential and commercial buildings with all-electric appliances (e.g., replacement of gas furnaces with highly efficient electric heat pumps)



#### ZERO-ENERGY BUILDINGS

Example: Incentives for the construction of buildings that are air-tight, well insulated, and energy efficient

### Workforce and Technical Assistance

Getting people ready to work new jobs in renewable energy and sustainability.



#### **WORKFORCE DEVELOPMENT**

Example: Incentives to technical colleges or similar institutions to create or expand renewable energy, energy efficiency, and electric vehicles technician training programs



#### TECHNICAL ASSISTANCE

Example: Provide information and training to public and private organizations to implement Energy & Environment Innovation measures (e.g., train water/wastewater engineers about greenhouse gasreducing equipment and practices)

# Sequestration

Capturing pollutants out of the air or before they are emitted.



#### CARBON CAPTURE & SEQUESTRATION (CCS)

Example: Incentives to install carbon capture equipment, for the development of carbon dioxide pipelines, and sequestration (storage) wells



Carbon Capture - The trapping of carbon dioxide just after it has been emitted but before it can enter the atmosphere. The carbon dioxide is then compressed into a liquid and stored in tanks or distributed via pipelines to sequestration (storage) wells.

Carbon Sequestration - The long-term storage of captured carbon, often by being pumped into a storage well deep underground.

Note: CCS projects are often paired with large greenhouse gas (GHG)-emitting facilities such as energy, manufacturing, or fuel production facilities.



### STREAMLINE PERMITTING FOR CARBON SEQUESTRATION WELLS

Example: Implement state-level permitting of sequestration wells to speed and streamline the permitting process



# TREES & NATURAL AREAS - CONSERVATION, RESTORATION & EXPANSION

Example: Incentives to conserve natural lands and to plant trees and native plants along streets, highways, interstates, and between agricultural fields



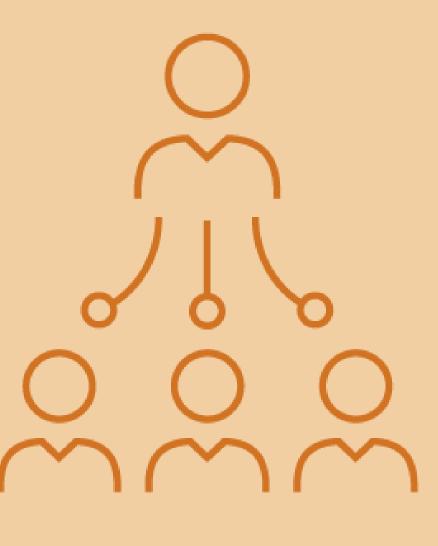
#### SUSTAINABLE FARMING METHODS

Example: Incentives for farmers and ranchers to implement and document sustainability best practices that reduce energy use, fertilizer use, and/or sequester carbon



# THANK YOU!

Share our Facebook posts!



Take the survey!



Have an idea?



Watch
your email
for project
updates!

