# Hood County, Texas Eighth Annual Path Forward Report

Ozone Advance Program

May 24, 2022

Hood County Clean Air Coalition

www.hoodcountycleanair.com

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## 1.0 Introduction

Hood County joined the Ozone Advance Program in April 2012. Ozone Advance is an expansion of the U.S. Environmental Protection Agency's (EPA's) cooperative efforts with states, tribes, and local governments to encourage actions that result in reduced ozone formative emissions to enable continued compliance in meeting the National Ambient Air Quality Standard (NAAQS) for ozone. This program targets areas that have ambient ozone levels close to the NAAQS and are at risk of violating the standard. It acts to assist in efforts to reduce air pollution, ensure continued healthy air quality levels, avoid NAAQS violations, and increase public awareness regarding ground level ozone as an air pollutant. As part of the Ozone Advance program a "path forward letter" is submitted to the EPA program contact that describes measures and/or programs that the area will implement to try to meet the program goals along with a schedule for implementation of each (EPA, 2012).

Ozone is a gas formed when three atoms of oxygen combine. This action may occur in the upper atmosphere as well as at ground level. In the upper atmosphere, about 6-30 miles above the Earth's surface, ozone forms a protective layer that shields the Earth from ultraviolet rays from the sun. At ground level, ozone is a secondary pollutant meaning that it is not directly emitted into the air but is formed by a chemical reaction between oxides of nitrogen (NOx) and volatile organic compounds (VOC) in the presence of sunlight, thus NOx and VOC are called "formative" emissions or "precursors" to ozone formation (TCEQ, 2014a). Major sources of the emissions of either NOx or VOC, or both, are industrial facilities, electric utilities, motor vehicle exhaust, gasoline vapors, and chemical solvents. Exposure to certain levels of ozone can cause health problems including respiratory problems like coughs and respiratory irritation as well as aggravating asthma symptoms (TCEQ, 2014b).

The Advance Program also addresses particulate matter (PM) pollution which sometimes originates from the same sources of precursor ozone emissions, nitrogen oxides. Particulate matter refers to particle pollution like dust, dirt, soot, or smoke, but also to very small particles that can only be detected by an electron microscope. Particle pollution can be PM<sub>10</sub> which are particles with diameters 10 micrometers or smaller and PM<sub>2.5</sub> which are fine inhalable particles generally 2.5 micrometers or smaller (EPA, 2022a). Sources of PM are construction sites, unpaved roads, fields, smokestacks, and fires. Other sources include particles that result from complex chemical reactions that involve nitrogen oxides and sulfur dioxide both of which are emitted from power plants, industrial sources, and vehicles. Smaller particles can penetrate deep into lungs and have been linked to health problems such as premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravation of asthma, decreased lung function, and increased respiratory symptoms like irritation of the airways,

coughing, or difficulty breathing (EPA, 2022b). Hood County does not have a monitor for particulate pollution, but as some particulate pollution results from nitrogen oxides, which are precursor emissions for ozone, some of the efforts to reduce these emissions for ozone reduction will also reduce PM.

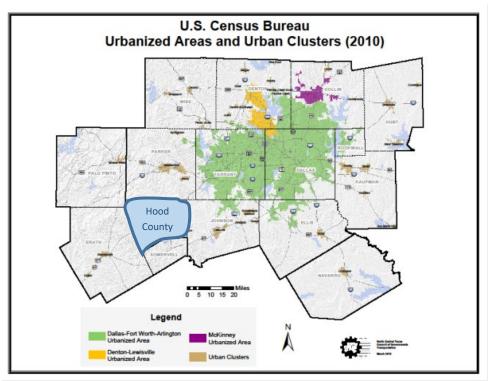
Hood County is a small rural county southwest of Fort Worth with an economy based on retail, retirees, tourism, and very little industrial or manufacturing professions. In April 2018, the EPA designated Hood County as attainment for the 2015 ozone NAAQS. Hood County has continued to take the initiative to address the air quality situation and, as part of its efforts to improve air quality, Hood County continues to partner with EPA through the Advance Program. As part of participation in EPA's Advance Program, areas are asked to submit annual updates of measures and programs in their Path Forward Documents. These documents are intended to fully describe the measures and/or programs the area will implement and provide a schedule for the implementation of each one (EPA, 2012). This document is the eighth annual update on the measures and programs discussed in the Path Forward for Hood County, Texas. The programs and measures included in the Hood County Path Forward to aid in reduction of the formative emissions of ozone are focused on voluntary efforts for fuel and energy savings, locally enforced ordinances, and educational efforts. Hood County is ensuring actions are taken to improve air quality in the region, provide healthy air for its citizens, maintain healthy economic growth, and show leadership in environmental sustainability.

# 2.0 Background

Hood County is in North Texas and encompasses 425 square miles. It is bordered by the counties of Erath, Somervell, Johnson, Parker, and Palo Pinto. The main trade center and county seat is the town of Granbury, Texas. Hood County's population in July 2021 was estimated at 64,222- a 4.3% increase over the 2020 estimation. Granbury is the largest town in Hood County followed by the smaller communities of Tolar, Cresson, and Lipan. Current estimates are that 25% of Hood County's population is aged 65 and older (U.S. Census, 2022). Figure 1 indicates the geographic area of Hood County in the north Texas region including urbanized areas. Figure 2 is a map of the county including the county seat of Granbury and smaller communities of Tolar, Cresson, and Lipan.

On December 23, 2020, EPA announced the final decision to retain the 2015 ozone standard of 70 parts per billion (ppb) without changes. On October 29, 2021, EPA announced it will reconsider the 2020 decision and is expected to complete the reconsideration by December 2023. EPA finalized the 2015 Ozone NAAQS in October 2015. This standard is lower than the previous 2008 Ozone NAAQS of 75 ppb. EPA strengthened the standard to ensure protection of

public health and the environment. In December 2017, 120 day letters were sent out by EPA. In the second round of area designations for the 2015 ozone standard, Hood County was designated attainment based on 2014-2016 data when the monitor's design value was 67 parts per billion (ppb).





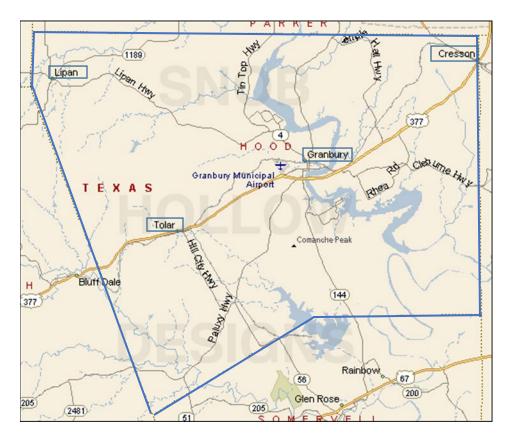


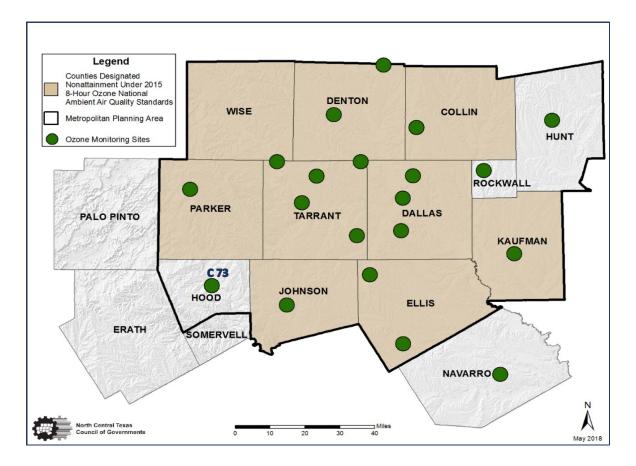
Figure 2. Map of Hood County, Texas Data Source: County Maps of Texas, 2013

# 3.0 Current Ozone Data

# 3.1 Ozone Design Values

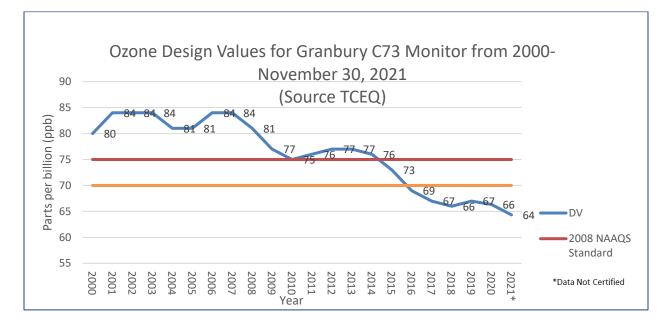
A statistic used to describe the air quality in a location with an air monitor is the Design Value (DV). The DV is used to designate nonattainment areas and measure progress towards meeting NAAQS. For ozone, the 2015 NAAQS is met when the annual fourth highest daily maximum 8-hour average concentration averaged over three years is 70 ppb or less. The air quality monitor in Hood County, located in Granbury, is a regulatory monitor operated by the Texas Commission on Environmental Quality (TCEQ), and is identified as C73. Figure 3 is a map of regional air monitors with the location of monitor C73 identified. The tan area of the map represents the 2015 Ozone Standard nonattainment area for the DFW region and green circles identify the location of ozone monitors.

Figure 3: Map of Regional Air Quality Monitors including Dallas-Fort Worth 8-Hour Ozone Nonattainment Area Data Source: NCTCOG, 2018



The preliminary 2021 DV for the C73 monitor in Granbury was 64 ppb in 2021 (TCEQ, 2022a). Data for the 2021 ozone season will be certified in May 2022. The preliminary design value of 64 ppb meets the 2008 and 2015 Ozone NAAQS. Hood County remains committed to working diligently to ensure that it will maintain levels below the NAAQS for ozone. Figure 4 is a graph of Ozone Design Values for the monitor C73 from 2000-2021. This figure provides an indication of trends in ozone concentrations from 2000-2018. The DV had been on a general decline until the years 2011 and 2012 but continued a general decline after 2014. It is hoped that with further implementation of programs and measures described in the Path Forward and reductions in transported emissions, these values will continue to decline.

**Figure 4. Ozone Design Values for C73 Monitor in Granbury from 2000-2021.** *Data Source: TCEQ, 2022a* 



#### 3.2 Number of Days that Ozone NAAQS Were Exceeded

Historic data regarding number of days that the 2008 75 ppb standard and the 2015 70 ppb standard were exceeded from 2008-2021 are found in Table 1. This table also includes the four maximum values reported for these years. The first max value has been declining over the last few years. The number of days of exceedance increased to one for 2021.

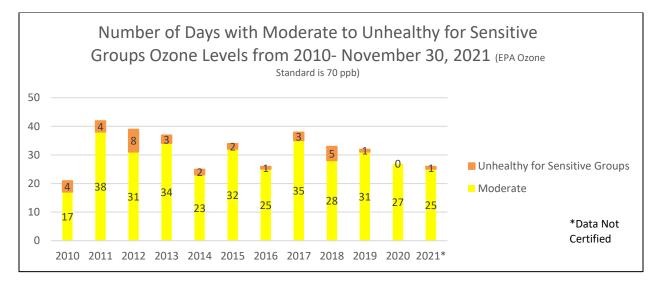
# Table 1. Number of days that the NAAQS Was Exceeded and Four Highest Maximum Valuesfor 2008-2020 for Monitor C73. (\*Data not certified)

Year	Number of Days	First Max	Second Max	Third Max	Fourth Max
2021	1	77	68	66	65
2020	0	70	65	63	62
2019	1	80	67	67	66
2018	5	80	78	74	71
2017	3	81	72	71	66
2016	1	80	63	63	63
2015	2	86	80	75	73
2014	2	91	87	74	73
2013	3	93	83	78	75
2012	8	82	80	80	80
2011	4	82	80	77	76
2010	4	80	80	79	77
2009	6	89	81	80	77
2008	1	78	75	73	73

Data Source: TCEQ, 2022b

The EPA Air Quality Index (AQI) is broken down into six categories. These categories are grouped by ozone levels and their associated air quality index values. The five categories and their associated indices are "good" (0-50), "moderate" (51-100), "unhealthy for sensitive groups" (101-150), "unhealthy" (151-200), "very unhealthy" (201-300), and "hazardous" (301-500). The "unhealthy for sensitive groups" category marks the first category with an ozone level above the NAAQS standard of 70 ppb (EPA Air Data, 2016). Figure 5 is a graphic representation for the number of days with "moderate" and "unhealthy for sensitive groups" ozone levels recorded at monitor C73 for the previous AQI associated with the 2008 Ozone Standard and 2015 Ozone Standard. Figure 5 indicates a general decline in the overall number of days with moderate and unhealthy for sensitive groups ozone levels from 2011-2021. While the number of days for each category seems to increase from 2016-2019, this reflects the change in levels associated with the 70 ppb 2015 ozone standard. The change caused readings that were considered "moderate" under the 2008 standard to be considered "unhealthy for sensitive groups" under the 2015 standard and readings that previously were considered "moderate" under the 2015 standard.

Figure 5. Number of Days with Moderate and Unhealthy for Sensitive Groups Ozone Levels from 2008-2020 at the Granbury C73 monitor. *Data Source: TCEQ, 2022c*.



# 4.0 Status of Programs

#### 4.1 Clean Air Strategy

In the early days of the formation of the Hood County Clean Air Coalition, a Clean Air Strategy was developed. This included efforts to limit emissions, zone for appropriate use, develop an Early Compact with EPA, convert city/county fleets to natural gas, convert city/county generators to alternative power sources, and seek voluntary action by all gas operators in the County. Regarding oil and gas emissions that were reported at the time to TCEQ, these were reported as "potential to emit" not actual emissions. In later emission inventories these corrections were made and showed that oil and gas related emissions were significantly less than earlier reported and have been declining since then. As mentioned in the Clean Air Strategy, the City of Granbury adopted an oil and gas zoning authority as a general matter. Regarding developing an Early Compact with EPA, the Hood County Clean Air Coalition took the steps necessary for the County to participate in the EPA Ozone Advance Program and continues to do so. The conversion of diesel fleets to natural gas proposed in the strategy has over time been presented with several obstacles and efforts were made to help with some those obstacles. There was no natural gas fueling infrastructure for the fleets to be able to use after conversion. Funds were used from the TCEQ Rider 7 Air Quality Planning Grant for nearnonattainment areas to help with installing propane fueling infrastructure, as it was the more affordable option than compressed natural gas. Another obstacle was a lack of locally available servicing of natural gas vehicles. There were successes in finding local service for propane lawn

mowers and this led to the expansion of use of propane riding mowers. Efforts have been made to notify fleets of training opportunities for working with natural gas fleets. The conversion to alternative power sources for generators faces the same challenges. Regarding seeking voluntary action by gas operators in the County, the gas operations have slowed dramatically in the County from the peak around 2008. The Clean Air Strategy for the Hood County Clean Air Coalition was a guide for where to start and learn from the challenges that arose from following the strategy.

#### 4.2 Current Projects

Current projects summaries are found in Table 2 Status of Measures and Programs. The measures and programs are more fully described here. The Hood County Clean Air Coalition is the stakeholder group for Hood County air quality planning and was formed in 2012. The group continues to meet monthly and had one new Board Member in 2022, the Granbury City Mayor, Jim Jarratt. The group continues to maintain an informational website and is overseen by nine board members and an air quality program manager. The group continues to maintain regional partnerships with the North Central Texas Council of Governments through the Air North Texas Coalition and DFW Clean Cities. Public awareness is an important component of air quality planning, but with recent challenges with funding programs, the previous efforts in advertising were not able to be continued. At the end of 2021, efforts were made to find ways to incorporate social media messaging for outreach.

Trip reductions from the use of direct deposit continue to be used by most of the large employers in the area. The City of Granbury continues to try to find funding opportunities to replace an older diesel-powered trolley. There are several highway improvements that are in the process of being constructed and being planned. The rail overpass project in Cresson broke ground in 2019 and is expected to be complete by Spring 2023 (Texas Department of Transportation, 2022). There are plans to expand Highway 377 that runs through the cities of Granbury, Tolar, and Cresson as well as improve the intersecting highway 144 in the coming years. Alternative fuel vehicles continue to be adopted in Hood County. In May 2022, there were 189 electric vehicles registered in Hood County (DFW Clean Cities, 2022) Idling is discouraged with voluntary actions supported by a Hood County resolution in 2012 and with the City of Granbury passing an Idling Restriction Ordinance in 2013. Anti-idling signs supporting the voluntary resolution were placed in locations around the County. Traffic flow continues to be a challenge but was aided with yellow flashing turn arrows added in 2018. The planned expansion of Highway 377 and improvements with the intersection of Highway 144 will benefit travel systems in the county. In 2019, the Texas Legislature reinstated the TCEQ Rider 7 Air Quality Planning Grant that provided funding for some air quality planning activities. The funding was made available in 2020 and funds were used for an Emission Inventory Review and a NOx monitoring project. These activities were completed at the end of 2021.

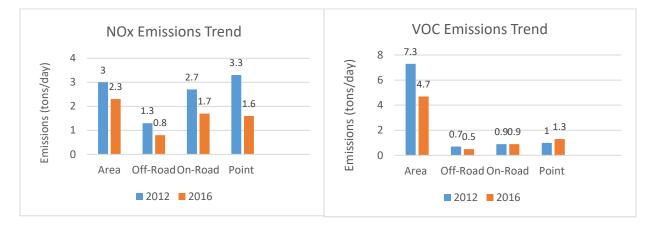
The Emission Inventory Review was done to review the most recent TCEQ emission inventory, the TCEQ 2016 modeling emission inventory, for Hood County to identify sources of emissions that may benefit from further analysis to better understand if more information is needed and to inform if portions of the inventory need to be prioritized for updating. The types of emissions described in the review were point sources, area sources, on-road, off-road, and biogenic emissions. Comparisons were made between the TCEQ 2012 modeling emission inventory and the TCEQ 2016 modeling emission inventory to demonstrate emission trends Area source emissions are associated with a compilation of sources that are sporadic and small individually but combined constitute an emission source. These sources include dry cleaners, residential wood heating, autobody painting, fires, oil and gas wells, and solvent uses. For Hood County, most area source emissions are associated with oil and gas sources. On-road emissions are from vehicles on roadways including light duty, medium duty, and heavy-duty vehicles. Off-road emissions are emissions from equipment not certified for highway use and includes lawn and garden equipment, heavy-duty construction equipment, agriculture equipment, aircraft, and locomotives. Point source emissions are large stationary emission sources. The three largest point sources are Wolf Hollow I Power Plant, which is the largest NOx emission source for Hood County, followed by the Cowtown Gas Processing Plant, and DeCordova Compressor. (Ramboll, 2021).

The TCEQ 2016 nitrogen oxides (NOx) emissions for each category were 2.3 tons per day (tpd) for area sources, 0.8 tpd for off-road sources, 1.7 tpd for on-road sources, and 1.6 tpd for point sources. Total anthropogenic NOx sources were 6.4 tpd. Biogenic sources were documented at 1.0 tpd. The TCEQ 2016 volatile organic compounds (VOC) emissions for each category were 4.7 tpd for area sources, 0.5 tpd for off-road sources, 0.9 tpd for on-road sources, and 1.3 tpd for point sources. Total anthropogenic VOC sources were 7.4 tpd. Biogenic sources were documented at 40.3 tpd (Ramboll, 2021).

In comparing the 2012 and 2016 TCEQ modeling emission inventories, there was an overall reduction in both NOx and VOC emissions. For NOx emissions, values for area, off-road, on-road, and point sources all fell between the two emission inventories. For VOC emissions, values for area and off-road sources both fell from 2012 to 2016. On-road sources stayed the same in the two inventories, while point sources slightly increased from 2012 to 2016. Biogenic sources of NOx and VOC fell between 2012 and 2016 as well, but this is likely due to changes in

emission inventory methodology. Reductions in on-road and off-road emission sources for both NOx and VOC are likely due to fleet and equipment turnover to newer vehicles and equipment with lower emissions. Figure six is a graph comparing the anthropogenic categories for the two emission inventories. The Emission Inventory Review found that the TCEQ 2016 emission inventories were generally accurate and complete and provided a few recommendations that might result in small changes to the Hood County emission inventory (Ramboll, 2021).





The Ambient Monitoring project was successful in collecting data including nitrogen oxide (NO), nitrogen dioxide (NO2), nitrogen oxides (NOx), and total oxidized nitrogen (NOy), and carbon monoxide (CO) from April through October 2021. The NOy, NO, and NO<sub>2</sub> measurements together can be used to determine the importance of local and distant emission sources in the production of high ozone in Hood County. Temporal trends were noted with higher concentrations noted later in the ozone season – August, September, and October. There were also diurnal trends noted with nitrogen compounds and CO having larger variability and higher concentrations at night followed by lower concentration and lower variability during the day and early evenings. NO concentration increased with the morning traffic. The variations that were noted were likely associated with a combination of factors including meteorological conditions and emission sources (University of Houston, 2021).

The United Cooperative Services is one of Hood County's electricity providers. They are in 14 counties in North Texas including a large portion of Hood County. In 2018, they began their first solar project with a 10-megawatt facility that went online to begin their community solar program. The program was expanded two years later to include a 16 MW portion of a solar facility in Andrews County. A third addition to the program began construction in 2021 to add

another 10-megawatt facility. Members with an average usage of at least 500 kWh per month over a year are eligible for a 2-kW subscription and members with an average usage of 1000 kWh a month can qualify for two 2-kW subscriptions for a total of 4-kW. The project is a partnership with Navisun and TurningPoint Energy (United Cooperative Services, 2022). Both the United Cooperative Services and Tri County Cooperative offer free energy audit services for their customers.

Vistra Corporation began construction on the De Cordova Energy Storage Facility which will be co-located on the site of the natural gas fueled DeCordova Power Plant. The storage facility will be a battery storage facility with 260 MW available. This is part of their new zero-carbon developments being done in conjunction with new solar projects. The energy storage facility is expected online in 2022 (Vistra Corp, 2021).

# 4.0 2020 Status of Measures and Programs

# Table 2. Status of Measures and Programs

Project	Entity	Description	Proposed Schedule in Path Forward	Current Status
Stakeholder Group	Hood County Clean Air Coalition (HCCAC)	<ol> <li>Holding monthly meetings.</li> <li>Researching and coordinating efforts to address air quality issues in Hood County</li> </ol>	Current Strategy	Added new Board Member in 2022
Informational website	Hood County Clean Air Coalition	The Hood County Clean Air Coalition website was developed in May 2012 and expanded with a new domain established in June 2014 - <u>www.hoodcountycleanair.com</u> The website was further expanded in February 2015.	Current Strategy	Meeting notifications, Ozone Advance Documents, and technical work documents are posted to the website.
Intern	HCCAC	Intern position replaced with an Air Quality Program Manager position in 2014.	Current Strategy	Ongoing
Regional Partnerships	HCCAC	The North Central Texas Council of Governments is a valuable resource	Current Strategy	The Coalition participates in meetings/conference calls with NCTCOG including bimonthly conference calls for Air North Texas ( <u>www.airnorthtexas.org</u> ) and DFW Clean Cities ( <u>www.dfwcleancities.org</u> ) meetings. The next meetings are scheduled for May 2022.

Project	Entity	Description	Proposed Schedule in Path Forward	Current Status
Public Awareness Campaign	HCCAC	Public Services Announcements for TV, radio, and print. Participation in Outreach events to increase awareness	Increased participation in NCTCOG programs by June 2013 and increased public service announcements by August 2013.	Current status           With the loss of funding for advertising and the actions related to COVID 19, there was no advertising in 2021 and there were no public events. Effort ongoing to try to include social media messaging in 2022.

			Proposed Schedule in Path	
Project	Entity	Description	Forward	Description
Trip	1. Hood	Use of Direct Deposit, support	Current Strategy	1. Continued use of direct deposit by most of the large
Reductions	County, City of Granbury, and numerous area	for public transportation and alternative transportation		employers in the County.
	employers 2. City of Granbury			2. Researching possible use of funding to replace the City of Granbury's trolley. Attempts to use grant funding to replace the trolley were unsuccessful in 2020, but research continues to try to find other funding opportunities for the trolley replacement.
Highway Improvement Projects	Texas Department of Transportation	Highway Projects Cresson Rail Overpass	Broke Ground in 2019	Rail overpass project broke ground in 2019. Construction expected to take about 2 years. Construction on this project is still in progress.
	Texas Department of Transportation	Highway 377 Expansion	Proposed projects in 2026 and 2032	Improvements at Highway 144 and Highway 377 intersection potential project for 2026. Highway 377 expansion through the City of Granbury potential project for 2032.

Project	Entity	Description	Proposed Schedule in Path Forward	Current Status
Alternative Fuel Vehicles	HCCAC	Conversion of city and county fleets	Research Conversion of City and County fleets	Public adoption of electric vehicles continues to increase. There are 189 electric vehicles registered in Hood County as of May 2022. Researching funding opportunities to aid in possible electric vehicle charging stations.
Idling Restrictions	<ol> <li>Hood County</li> <li>City of Granbury, Tolar, and Cresson and Hood County</li> </ol>	Efforts to increase awareness to reduce idling and idling restrictions	Hood County passed a resolution supporting voluntary idling restrictions and the City of Granbury was considering additional idling restrictions	<ol> <li>A voluntary idling restriction resolution was passed by Hood County in 2012. The county does not have the authority to enforce this but encourages voluntary actions with the Resolution. Signs providing educational outreach were installed at three county owned parking lots in 2015.</li> <li>Ordinance enforcement is done by the Granbury Police Department for the Idling Restriction Ordinance. Anti-idling signs provide educational outreach. The City of Granbury passed an Idling Restriction Ordinance in October 2013 Anti-idling signs supporting the voluntary measure of the county resolution were installed at four City of Granbury owned parking lots, and one each in Cities of Tolar and Cresson</li> </ol>

Project	Entity	Description	Proposed Schedule in Path Forward	Current Status
Travel Systems Management	HCCAC	Traffic flow and signals	August 2013	Signals on Highway 377, the main road through Granbury, are regularly monitored by TxDOT Yellow flashing turn arrows were added in 2018 along Highway 377 to assist in traffic flow.
Review of Air Permits	HCCAC	Monitor air permits.	Current Strategy	Ongoing
Modeling Emission Sources	HCCAC	Technical Projects	Long term Strategy for future consideration	Rider 7 funding was re-established in 2020. An Emission Inventory Review and Ambient Monitoring project were completed in 2021.
Review of Efforts at Eagle Ford Shale	HCCAC	Outreach efforts to oil and gas companies	Long term Strategy for future consideration	With the reduction in oil and gas activities in Hood County this is now a reduced priority.

Project	Entity	Description	Proposed Schedule in Path Forward	Current Status
Improved Energy Efficiency	1. United Cooperative Services And Tri County Cooperative and United Cooperative	1. Tri County Cooperative and United Cooperative both offer free energy audits for customers	Long term Strategy for future consideration	1. Ongoing
	2. Local governments in Hood County	2. Local governments participated in recording energy usage to the State Energy Conservation Office		2. Ongoing
Renewable Energy	United Cooperative Services	Community Solar	Ongoing	The first solar facility for United Cooperative Services was a 10 MW solar array for members of the Cooperative to sign up for through the Community Solar program. The first 13,000 subscriptions are filled. An additional 10 MW is being added in 2021. That combined with 16MW from a solar facility in West Texas provides a total of 36 megawatts of solar energy available to 64,000 Cooperative members in 2kW subscriptions.
	Vistra Corp	Battery Energy Storage Project	Ongoing	Developing a 260 MW DeCordova Energy Storage Facility in Hood County. Project to be completed in 2022. This will serve as peaking capacity.

# **5.0 Implementation Schedule**

As part of the Ozone Advance Program, it is recommended that an area commit to a five-year term, with an option to renew at the end of the term. Hood County joined the Advance Program in April 2012 and commits to continuing to follow the general schedule:

May 2022 Submit eighth annual report on status of local air quality, measures and programs in place and lessons learned, re-evaluate and revise path forward as necessary.

Summer 2022 Action on measures/programs:

- Review preliminary air monitoring results and re-evaluate path forward
- Research and develop new and/or revise existing measures/programs as appropriate
- Research and evaluate any funding opportunities against program goals

May 2023 Submit annual report on status of local air quality, measures and programs in place and lessons learned, re-evaluate and revise path forward as necessary.

Hood County continues to be committed to the Ozone Advance Program as part of its efforts to improve air quality in the region. Through the formation of the HCCAC, the county has brought together many groups of stakeholders to coordinate efforts to address the issues. The coalition represents that these stakeholders continue to support taking action to support clean air efforts including participation in the Ozone Advance Program.

Mark Franco, Chairman of Hood County Clean Air Coalition

Michelle McKenzie, Air Quality Program Manager Hood County Clean Air Coalition

### References

Air North Texas. http://airnorthtexas.org. Accessed May 16, 2022.

County Maps of Texas. http://countymapsoftexas.com/hood.shtml. Accessed April 30, 2013.

Dallas-Ft. Worth Clean Cities Coalition. https://www.dfwcleancities.org/oldevnt. Accessed May 16, 2022.

EPA. Air Data. http://epa.gov/airquality/airdata/. Accessed March 28, 2016.

EPA. 2012. Ozone Advance Guidance April 4, 2012. EPA's Office of Air Quality Planning and Standards. http://www.epa.gov/ozoneadvance/pdfs/2012404guidance.pdf.

EPA. 2022a. Advance Program. https://www.epa.gov/advance/basic-information. Accessed May 12, 2022.

EPA. 2022b. Particulate Matter. https://www.epa.gov/pm-pollution/particulate-matter-pm-basics. Accessed May 12, 2022.

NCTCOG. 2013. http://www.nctcog.org. Accessed March 14, 2013.

NCTCOG. 2018. Air Quality Monitors.

https://www.nctcog.org/nctcg/media/Transportation/DocsMaps/Quality/Air/9\_county\_nonatt ainment\_\_2015\_NAAQS.png. Accessed 11/28/2018.

Ramboll US Corporation. 2021. Emission Inventory Review and Recommendations for Hood County. Report prepared for Michelle McKenzie, Hood County Clean Air Coalition, 132 North Houston Street, Granbury, TX 76048. December.

TCEQ. 2014a. Ozone: The Facts. http://www.tceq.texas.gov/airquality/monops/ozonefacts.html. Accessed April 16, 2014.

TCEQ. 2014b. Sources of Air Pollution.

http://www.tceq.texas.gov/airquality/areasource/Sources\_of\_Air\_Polution.html. Accessed April 16, 2014.

TCEQ. 2022a. Compliance with Eight-Hour Ozone Standard. http://www.tceq.texas.gov/cgibin/compliance/monops/8hr\_attainment.pl. Accessed February 15, 2022.

TCEQ. 2022b. Four Highest Eight-Hour Ozone Concentrations. https://www.tceq.texas.gov/cgibin/compliance/monops/8hr\_4highest.pl. Accessed February 15, 2022. TCEQ. 2022c. Daily Maximum Eight-Hour Ozone Averages by Month. http://www.tceq.texas.gov/cgi-bin/compliance/monops/8hr\_monthly.pl. Accessed February 15, 2022.

Texas Department of Transportation. US 377 Cresson Relief Route. http://www.txdot.gov/inside-txdot/search-

results.html?q=US+377+Cresson+Relief+Route&search\_section=main. Accessed May 16, 2022.

United Cooperative Services. https://ucs.net. Accessed May 16, 2022.

University of Houston, Department of Earth and Atmospheric Sciences, and Ramboll. 2021. Ambient Monitoring Near the Granbury Continuous Air Monitoring Station. Report prepared for Michelle McKenzie, Hood County Clean Air Coalition, 132 North Houston Street, Granbury, TX 76048. November.

U. S. Census Bureau. http://www.census.gov. Accessed May 13, 2022.

Vistracorp. https://investor.vistracorp.com/investor-relations/news/press-releasedetails/2020/Vistra-Accelerates-Pivot-to-Invest-in-Clean-Energy-and-Combat-Climate-Change/default.aspx. Accessed May 4, 2021. Appendix A

#### Hood County Clean Air Coalition Members

#### Name

#### Affiliation

Board Members Mark Franco, Chairman John Campbell Brian Caruthers Mark Clark Teena Conway Ron Cotton Joe Drew Jim Jarratt Terry Johnson

#### Members

Brian Bondy Jan Caldwell Lori Clark Chris Coffman Eva Gregory Chris Klaus Chuck Licata Derinda Long Aaron McLain Michelle McKenzie

Mauri Montgomery

Lee Overstreet Dave Porcher Michael Ross Dr. Allison Stamatis Congressman Charlie Stenholm Shannon Stevenson Andrea Thomas Owner, Diamond C Director of Transportation, Granbury ISD Luminant Environmental Manager Mayor, City of Cresson Hood County Commissioner Vista Proppants and Logistics Mayor, City of Granbury Mayor, City of Tolar

Granbury Chamber of Commerce Retired NCTCOG Granbury City Manager Granbury, Finance Director Senior Program Manager, NCTCOG **Granbury Broadcast Specialist** Transit System Granbury, Parks and Recreation Director Air Quality Program Manager, Hood County Clean Air Coalition United Cooperative, Director of Community Relations Winston Properties **Dave Porcher Mowing Service** Granbury Assistant City Manager Weatherford College Retired Program Manager, Transit Operations, NCTCOG National Service Research