



**PIMA COUNTY DEPARTMENT OF ENVIRONMENTAL QUALITY
VOLUNTARY NO-DRIVE DAYS/CLEAN AIR PROGRAM • CONTRACT NO. ADEQ18-198217
QUARTERLY PROGRESS REPORT • OCTOBER 1, 2019 – DECEMBER 31, 2019**

PROGRAM EXPENSES -----

PERCENT OF WORK COMPLETED: 50%

Reimbursable Services Expense totaled \$ 61,885.95 and included:

- \$31,365.57 – Labor with Fringe Benefit costs in October, November, December:
 - \$23,561.29 – Labor expense
 - \$ 7,804.28– Fringe Benefit expense
- \$99.60 – Office Supplies
- \$10,836.64- Advertising No-Drive Day event, promotional items and printing
- \$19,584.14 - Administrative Overhead

• GOAL 1: DEVELOP OUTREACH REGARDING HEALTH IMPACTS OF O₃ AND PM----

PERCENT OF WORK COMPLETED: 50%

WORK ACCOMPLISHED:

EXPAND RELATIONSHIPS WITH SCHOOLS

- **Semester Long After-School Science Class**

Staff provided a series of air quality classes for students signed up for the Quasar Academy After-School Science class at Quail Run Elementary School. Staff developed and provided 12 lessons for the class last fiscal year, and was invited to provide the same program again in the fall of 2019.

Nine of the 12 classes were held this quarter and included:

- How weather, geography and geology affect air quality;
- Health effects from breathing air pollution;
- Grasping measurements and discussion of measuring air pollution with PDEQ air monitors;
- Healthy Air Is In Our Hands school-wide pledge promotion;
- Capturing particulate samples around school campus on microscope slides and using microscopes to view slides;
- Air Quality Index and finding air quality data on PDEQ's website;
- Actions individuals and businesses can take and inventions developed to reduce air pollution; and
- Using the power of air to shoot off stomp rockets.

Worksheets were provided during each class for students to demonstrate content awareness through a brief question/answer exercise. In addition, pre- and post-program surveys were administered to assess program effectiveness. Data indicates a solid increase in awareness of air quality issues and resources.

- **Potential Collaboration with Tucson Unified School District (TUSD)**

In October, staff met with a representative of the school district to discuss a potential partnership in providing information about drive-less initiatives for 86 schools in the district. We discussed the potential of providing presentations for classrooms, adult groups and school staff and articles for social media and newsletters. A description of PDEQ's presentations was emailed, to be shared amongst staff at the schools. Future meetings are planned.

- **Cooper Center for Environmental Learning**

In December, staff was approached by an instructional specialist with the Cooper Center who is developing a program for high school students regarding air quality. As a resource, they are using PDEQ's Clean Air curriculum published in 1996. The instructor touched base to ask if we could help confirm information is current and applicable. They would like to incorporate numerous ideas and activities from the curriculum and were seeking permission to use the content. VNDD staff expressed delighted approval and agreed to help answer questions, share resources and brainstorm if desired. Staff also requested to see the final product for potential use in our outreach program, and asked if they would share how many students are exposed to the materials once the program is operational.

EXPAND RELATIONSHIPS WITH SMALL BUSINESSES

Staff maintains a relationship with the Downtown Tucson Partnership (DTP) and works with them to promote special VNDD events as warranted and re-supply with Clean Air Program literature, including bookmarks, *Desert Dwellers Know* activity sheets and *The Loop* Maps. The Partnership is a non-profit 501 (c)(6) corporation created to implement enhanced municipal services for the Downtown Business Improvement District. Included in their services is marketing and promotions to downtown businesses.

The following businesses responded favorably to our initial connection: Arizona School for the Deaf and Blind, Banner UMC, City of Tucson, El Rio Health Center, D&D Pinball, Epic Café, Time Market, Caruso's Italian Restaurant, Urban Fresh Restaurant (plant-based local organic food), Pima Community College and University of Arizona Parking and Transportation Services. In addition, staff shared educational materials with a roving artist/sculptor and small business owner of Gardening Insights, who promotes environmentally-sensitive urban wildlife habitat and garden design services in downtown Tucson. At this time, staff is looking at innovative strategies to identify and address barriers to employees engaging in alternate modes of transportation. Outreach options include PDEQ staff providing presentations, resource tables at health or benefits fairs, newsletter articles, or supplying businesses with literature, STEAM-inspired activity sheets and other air quality resources.

DETERMINE OPTIMAL WAYS TO ENGAGE TARGET AUDIENCES

Staff employs a multi-media approach in order to effectively reach a wide variety of audiences and unique individuals within each audience. A combination of PowerPoint, props, demonstrations, stories, games, picture cards, audio-visuals and different perspectives are incorporated to engage multiple types of learners and address different motivators within any given audience.

Staff updates presentations, creates new activities and crafts messages and articles while considering relevant current issues.

REPORTS OR DATA PRODUCED:

PRE- AND POST-PROGRAM SURVEYS AT QUAIL RUN ELEMENTARY SCHOOL

- Increase in frequency of student's thinking about air: 40%
- Increase in the ability to list five or more causes of air pollution: 60%
- Increase in the ability to list five or more health effects from breathing unhealthy air: 40%
- Increase in ability to list five or more actions to reduce air pollution: 40%
- Increase in understanding where to find current air quality information: 80%

Student comments on what they liked the best about the class:

- Everything was awesome and she did it perfectly.
- All the cool stuff we do here.
- Learning about air.
- It was fun with the experiments.
- Projects.

Student comments on suggestions for improvement:

- Needs some more students.
- More stuff.
- Nothing. Everything was perfect. Nothing was wrong.

• **GOAL 2: COMMUNITY-WIDE EVENTS & ACTIVITY** -----

PERCENT OF WORK COMPLETED: 25%

WORK ACCOMPLISHED:

CYCLOVIA TUCSON

Cyclovia Tucson is a free mobile event aimed at families to encourage no-drive days and enjoyment of walking, cycling, skating, playing and having fun in car-free streets. This event, organized by the Living Streets Alliance (LSA) and supported by VNDD, provides a venue for people to practice and become comfortable riding bikes and walking throughout various neighborhoods. It enables individuals to become more confident alternate mode users without the common obstacles caused by motor vehicle traffic.

The October 27, 2019 event was attended by an estimated 40,000 people and encompassed a route from the Julian Wash Archaeological Park to Mission Manor Park. Not only providing a car-free pathway along this route, Cyclovia Tucson provided live music, food trucks, a climbing rock wall, zipline, games, free bike helmets, mariachi and folklorico performances and dozens of activity booths throughout the 3.75 mile stretch.

As a sponsor of the event, PDEQ provided advertising in Arizona Bilingual Magazine, Zocalo Magazine and social media platforms made possible with VNDD/Clean Air Program funding. Our logo was posted in the advertisements and on multiple LSA webpages and promotional emails. We were also a featured activity point in the *Cinco de Cyclovia* scavenger hunt that drew more attention to our booth.

USE THE LOOP FOR YOUR COMMUTE PROJECT

Materials promoting the Loop multi-use, car-free path are distributed at outreach events and the *Use the Loop for Your Commute* flyer and maps are available at new employee orientations for Pima County employees throughout the year.

SUPPORTING COMMUNITY PROGRAMS TO ENHANCE NO-DRIVE DAYS GOALS

VNDD staff works with many groups to incorporate No-Drive Days efforts throughout the community.

- **Arizona Department of Environmental Quality**
PDEQ staff continued to promote the Arizona Department of Environmental Quality five-day air quality forecast program for the Pima County region for ground-level ozone and coarse particulate matter. It is intended to not only provide warnings to people who might have health issues associated with elevated levels of air pollution, but also to act as a preemptive measure, providing time for people to make plans that could help keep air quality in a healthy range when it is forecasted to be unhealthy.

VNDD staff promoted the forecasting service at presentations and events, on social media, in news releases and on a link on the main page of PDEQ's website.

- **Green Valley Community**

Staff represented Pima County DEQ at the Green Valley Council meetings to keep the committee updated on air quality issues. Presentations on air quality issues are given each month and questions about local concerns are addressed. This involvement has strengthened rapport with the Green Valley community and has proven helpful when reaching out to the at-risk population on sensitive issues, such as air quality and mining activity.

- **Living Streets Alliance**

The Living Streets Alliance (LSA) is a 501(c)(3) organization established to promote healthy communities by empowering people to transform streets into vibrant places for walking, bicycling, socializing and play. In addition to supporting Cyclovia Tucson to help promote bicycling and walking in place of vehicle trips, VNDD staff connects with LSA regarding the Bike Valet Program and other potential collaborative projects.

Bike Valet Program:

- Free, conveniently placed bike racks at community events encourages participants to leave cars at home and use bicycle transportation to venues;
- VNDD staff provided funding for the purchase of bike racks during Fiscal Year 2014-2015 that continue to be used;
- During this quarter, the bike racks were utilized at three events: Cultivate Market, BICAS 30 Year Anniversary and the BICAS Art Auction where a total of 80 bikes were parked, replacing car trips.

- **National Weather Service**

Staff collaborates with the National Weather Service (NWS) to provide air quality information to the public. The partnership provides timely reports that warn the public of potential or existing airborne dust and ozone issues and include a health impact statement to protect the public. When NWS issues air quality alerts the message also includes information about the availability of air quality information on the PDEQ website.

- **Pima Association of Governments**

Staff continued to collaborate with PAG on a variety of programs and projects:

- Partnerships: Staff met with staff from PAG in October to discuss ways to expand outreach to major employers and local jurisdictions. Based on the discussion, a plan was created and sent to PAG for review and approval.
- Air Quality Subcommittee: Chair meetings; help develop agenda with informative speakers to educate members about air quality issues and concerns; provide presentations regarding various air quality subjects.
- Travel Reduction Task Force: Jurisdictional representative, provide air quality-related presentations, Travel Reduction Program Enforcement Agency for companies located in unincorporated areas of Pima County.
- Pima County's Travel Reduction Program (TRP): Promoted alternate modes of transportation to approximately 7,000 Pima County employees via presentations, newsletter articles, email blasts, intranet site, Facebook group *Commute Trips & Tips*, and Reduced Emissions and Air Pollution (REAP) rewards program.
- Staff facilitated the annual Travel Reduction Employee survey for PAG, as required by the Pima County Travel Reduction Ordinance 17.40. To entice employees to take the short survey, staff compiled a page of humorous jokes and provided an on-line link to it as a thank you for taking the survey. Staff promoted the survey to Pima County employees by:

- Providing a draft memo from the County Administrator to employees and arranging it's distribution to employees via email by Pima County's Communications Office;
- Arranging for placement on the ADP system for all employees to view;
- Submitting an article for the employee eScoop newsletter and TRP website which were posted in October;
- Sent an email and email reminders to Department Personnel Representatives with a request to promote the survey to employees within their departments;
- Sent a message to members of our internal TRP listserves; and
- Posted an announcement on our *Commuter Trips and Tips* Facebook group page.

- **Pima County Government Departments**

- ***Communications Office***

- Staff worked with graphic designers and communications specialists on a variety of projects including eScoop articles and news releases.

- ***Environmental Quality***

- With reimbursement funding from the PDEQ Director's Office, staff operates a Guaranteed Ride Home Program for Pima County employees. This helps to encourage and serve employees who use alternate modes of transportation for their work commutes by providing a reimbursable ride home if they are without a personal vehicle and a crisis or emergency happens. Eighty-one Pima County employees are registered for this program, four of which registered during this quarter. One emergency ride traveled this quarter, cost the Director's Office \$15.40.

- ***Health Department***

- Bicycle and Pedestrian Program: Promoted on-line and paper maps of bike routes and The Loop non-motorized pathway, employee bike-share program, and related literature with the general public and Pima County employees.
 - VNDD staff met with the Health Department's Principal Investigator of the Racial and Ethnic Approaches to Community Health (REACH) program. VNDD and REACH staff have mutual interest to promote The Loop, a 131-mile car-free shared path in Tucson. Many Clean Air Program resources align well with REACH efforts to support use of alternative modes, highlighting active transportation options. In addition, The Loop's access to the natural environment connects with Drive-Less initiatives and PDEQ's overall public health and wellness goals.

- ***Human Resources***

- New Employee Orientations: Provided Travel Reduction Program presentations and informational literature about alternate modes of transportation to new employees.
 - Presentations delivered this quarter: 4
 - Attendees: 133
 - Bus Pass Sales: Pima County employees are eligible to receive a 50% subsidy on 30-day transit passes via the HR Benefits program.
 - Passes sold this quarter: 874

- ***Office of Sustainability and Conservation***

- Staff contributes to the Alternate Fuels Chapter of the Sustainability Action Plan for County Operations. This subcommittee is dedicated to reduce miles driven, improve efficiencies, and reduce emissions from the fleet of vehicles used by Pima County employees. Key participating departments on the subcommittee include Fleet Services,

Environmental Quality, Human Resources, Facilities Management, and others as topics warrant.

- The team is working on projects to reduce emissions by decreasing employee vehicle idling and providing services to make using alternate modes more amenable. An idle reduction program for Pima County departments and employees is implemented, with data acquired from GPS units installed in most County fleet vehicles. Promotional *Idle Less* bookmarks continue to be distributed and GPS data reports are sent to department heads monthly for internal use. An article about idling less is planned for the January *Ask the Green Geek* column of the Pima County FYI public newsletter. An additional article about the success of the idle reduction program for the County's Regional Wastewater and Reclamation Department will be published in the January edition of the eScoop.

Public Libraries and Community Centers

- Several years ago, staff had set up a partnership with the Pima County Public Library system on a materials distribution program, *EcoNook for Desert Dwellers* (for teenagers and adults) and *Eco Kids Corner* (for 12 years and younger). The program promotes air quality and environmental awareness through PDEQ educational materials. VNDD staff remained available to respond to requests for literature.
- Due to decreasing space availability, most librarians have opted to offer resources as part of ongoing programs and/or as part of existing educational literature displays.

• Sun Tran and Sun Link Streetcar Transit Services

- Promoted transit services to Pima County employees and the general public by providing on-line resources, Ride Guides and other brochures about how to ride transit.
- Sun Tran donated \$10 value-loaded SunGO transit passes to encourage Pima County employees to use transit for work commutes. Staff provides the identification numbers of the distributed cards so that Sun Tran can track their usage through time and assess the effectiveness of the promotion.
 - Passes distributed at New Employee Orientations this quarter: 18

• Tucson Audubon Society

- Desert Dwellers Education Project: PDEQ staff continued to collaborate with Tucson Audubon Society (TAS) to distribute the desert conservation poster, *Desert Dwellers Know – A Celebration of Byrd's Words* and other VNDD literature, including bookmarks and The Loop maps. TAS staff updated their gift shop's webpage to highlight the poster and activity book.
- The companion coloring and activity book, *Desert Dwellers Know Desert Colors*, is for sale at the Audubon Society gift store. The piece was developed to extend the Desert Dwellers Know concept using attractive artwork and the poetry of Byrd Baylor to provide lessons about sustainable desert living. A series of facts, questions and academic challenges helps adhere this piece to core STEAM (science, technology, engineering, art and math) principles for easy integration with elementary school classrooms. Proceeds from the sales will be used for future Desert Dwellers Know educational projects and for reprinting the poster and activity book.

• Tucson Clean & Beautiful

- Staff serves on the Board of Directors of Tucson Clean & Beautiful and shares information regarding No-Drive Days goals and special events as appropriate.
- TCB has a very active "Trees for Tucson" program that staff helps to promote for the many air quality benefits provided by shade trees.
- VNDD and TCB promote each other's materials at select community outreach events.

- **University of Arizona**

- In October, VNDD staff met with staff from the UofA Office of Sustainability, UofA Compost Cats, City of Tucson and Tucson Clean and Beautiful to share information about each other's programs and consider collaborating on projects where our missions overlap.

REPORTS OR DATA PRODUCED:

EMISSIONS REDUCTION FROM HEALTHY AIR IS IN OUR HANDS CAMPAIGN:

- # participants pledged to not drive this quarter: 553
- Total vehicle miles reduced this quarter: 211,900
- Pounds of pollution and greenhouse gases avoided this quarter: 181,111

EMISSIONS REDUCTION BY PIMA COUNTY EMPLOYEE TRIPS ENTERED IN PAG SUN RIDESHARE REWARDS PROGRAM:

- Number employees who entered trips during this quarter: 20
- Daily commute logs entered this quarter: 827
- Total vehicle miles reduced this quarter: 14,806
- Pounds of air pollution and greenhouse gases reduced this quarter: 11,621

EMISSIONS REDUCTION FROM PIMA COUNTY EMPLOYEE USE OF TRANSIT:

- Average round-trip commute miles for Pima County employees (October 2019 TRP survey): 24.6
- Transit passes sold during first quarter: 874 (average of 291 per month)
- Accounting for holidays and vacation days and assuming alternate modes were used three days per week for 13 weeks this quarter:
 - Single-occupied vehicle driving miles reduced: 279,185
 - Pounds of air pollution and greenhouse gas emissions reduced: 238,620

EMISSIONS REDUCTION FROM PIMA COUNTY EMPLOYEE GUARANTEED RIDE HOME PROGRAM:

- Employees currently signed up for this program: 81
- New registrants this quarter: 4
- Claims for reimbursement: 1 (\$15.40 paid for by funds from PDEQ Director's Office)
- Vehicle miles traveled reduced this quarter by employees using alternate modes: 109,954
- Annual miles traveled reduced by these employees: 422,900
- Pounds of air pollution and greenhouse gas emissions reduced per year: 384,455

CYCLOVIA TUCSON, FALL 2019:

Volunteers and LSA staff surveyed 357 Cyclovia Tucson attendees to gain insight into their experiences at Cyclovia and their demographics. Survey results indicate that the event appeals to a diverse range of people living in 55 different zip codes. The event attracts people of all ages and genders, with nearly 40% of survey participants bringing children with them.

Survey respondents found out about the event by word-of-mouth (38.6%), social media (32.1%), email or website (28.3%), and 42.6% of respondents knew that LSA puts on Cyclovia.

When asked if participation in the event makes them more likely to bike or walk for transportation in the future, 64.7% said that it did.

Participants said what they like the most about the event is the community feel, seeing friends and family and socializing (30%). Additional likes include biking (11.7%) and the fact that they do not have to worry about traffic and safety issues since roads were closed to car traffic (28.5%).

- Approximate number of Cyclovia attendees: 40,000
- Respondents who have previously attended Cyclovia Tucson events: 73.1%
- Respondents who drove to the event: 51.8%
- Respondents who biked to the event: 34.7%
- Respondents who walked to the event: 5.6%
- Respondents who used multiple mode combinations to the event: 8.4%

• **GOAL 3: PRESENTATIONS & IN-DEPTH INTERVIEWS**-----

PERCENT OF WORK COMPLETED: 110%

WORK ACCOMPLISHED:

Staff creates, customizes, updates and delivers presentations to a wide range of audiences to educate and create greater awareness about air quality issues and no-drive actions that can be taken to reduce emissions and keep the air healthy to breathe. In addition to the 38 presentations delivered reaching 608 people this quarter, two in-depth interviews were given to the Desert Leaf Magazine and a University of Arizona journalism student regarding air quality. Audience reach via these interviews is unknown as reader data is not available.

REPORTS OR DATA PRODUCED:

Presentations			
Date	Location	# Presentations	# Attendees
1-Oct-19	Quail Run Elementary School	1	2
2-Oct-19	Green Valley Council	1	10
3-Oct-19	Institute of Learning	1	55
8-Oct-19	Quail Run Elementary School	1	4
10-Oct-19	Pima County New Employee Orientation	1	41
22-Oct-19	Quail Run Elementary School	1	3
25-Oct-19	Sierra 22-8 School Career Day	4	97
26-Oct-19	Envision Tucson Sustainable	1	15
29-Oct-19	Quail Run Elementary School	1	3
31-Oct-19	Pima County New Employee Orientation	1	33
5-Nov-19	Quail Run Elementary School	1	4
6-Nov-19	Green Valley Council	1	8
12-Nov-19	Quail Run Elementary School	1	5
14-Nov-19	UA Center for Integrative Medicine	1	1
19-Nov-19	Quail Run Elementary School	1	3
21-Nov-19	Pima County New Employee Orientation	1	23
22-Nov-19	AZ STEM Adventure	13	230
26-Nov-19	Quail Run Elementary School	1	3
2-Dec-20	Himmel Park Library	1	6
3-Dec-20	Quail Run Elementary School	1	5
4-Dec-19	Green Valley Council	1	20?
7-Dec-20	Wheeler Taft Abbett Library	1	21
17-Dec-20	Pima County New Employee Orientation	1	36
	TOTAL	38	608

• GOAL 4: DEVELOPMENT OF INFORMATIONAL MATERIALS -----

PERCENT OF WORK COMPLETED: 85%

WORK ACCOMPLISHED:

EVENT PROMOTIONS

As a sponsor of Cyclovia, the Clean Air Program logo was included in promotional webpages, emails and printed materials provided by the Living Streets Alliance.

ARTICLES WRITTEN

- **PDEQ Internet**

Six articles based on VNDD news releases were posted on the PDEQ website this quarter. Some of these articles were also posted on Pima County's main website and their weekly public newsletter, the Pima County FYI.

- **eScoop Newsletter**

Staff wrote three articles for this on-line newsletter for thousands of Pima County employees. The articles provided information about taking the annual travel reduction survey, enjoying time outdoors with alternate mode work commutes, and reducing driving during the holiday season.

Additional resources at the end of the articles include links to the Travel Reduction Program intranet site, including pages for Guaranteed Ride Home Program, transit, bike, walk, carpool, and commuter contests, contact information and an opportunity to join the Pima County Employee Commute Trips & Tips Facebook group.

PROMOTIONAL MATERIALS

- Annual TRP survey for Pima County employees promoted via multiple avenues including:
 - Direct emails from the County Administrator to employees;
 - Messages on-line in ADP Self Service Portal which employees must access at least twice per month;
 - Email message to Department Personnel Representatives;
 - Email to Travel Reduction list serves; and
 - Email to PDEQ staff.
- *Healthy Air Is In Our Hands* instruction sheet for Quail Run teachers to aid with distribution of drive-less pledge to student families.
- *Awesome Air In Pima County* promotional flyer provided by Pima County Public Library to promote the VNDD presentation delivered on December 2.

NEW INTERACTIVE ACTIVITY

- Staff created two interactive magnetic puzzles to use at community activity booths. The image of one puzzle is the *Drive Less Smile More Healthy Air Is In Our Hands* icon, and the other is of the cover of the *Desert Dwellers Know Colors* activity book. The pieces are comprised of re-used 2.5"x3" magnets, printed paper, rubber cement, and 2" tape for durability. Staff usually provides the puzzles partially put together for participants to complete, and the finished result provides a conversation starter about No-Drive Days messaging.

• GOAL 5: USE OF MEDIA FOR NOTICES OF UNHEALTHY OZONE FORECASTS -----

PERCENT OF WORK COMPLETED: 50%

Prompted by ADEQ Five-Day Air Quality Forecasts of high levels of ozone and real-time PDEQ air quality data, VNDD staff creates and distributes social media messages and news releases for Pima County residents. It is expected these warnings will only need to be released during ozone season, the first and fourth quarters of our fiscal year.

WORK ACCOMPLISHED:

MEDIA RELEASES

Although no news releases regarding unhealthy ozone forecasts were distributed this quarter, one news release distributed in October announced the end of ozone season and included statements about Pima County's status in relation to ozone pollution and the national health standard.

SOCIAL MEDIA MESSAGING

No unhealthy ozone forecasts were posted on social media this quarter as ozone season is over. However, one tweet on Twitter was posted on October 11, which specifically noted that ozone levels were looking good. The post also encouraged readers to consider sharing rides to work to keep the air healthy.

• GOAL 6: DISTRIBUTION OF INFORMATIONAL MATERIALS -----

Staff distributes information to the general public and specific audiences via website posting, e-mails to list serves, articles for newsletters, social media, and the distribution of literature through libraries, community centers and community outreach events.

PERCENT OF WORK COMPLETED: 103%

WORK ACCOMPLISHED:

PDEQ WEBSITE

Staff continued to promote, update and maintain the PDEQ website, posting six new pages developed from news releases about air quality issues.

PIMA.GOV/HEALTHYAIR

With the help of Pima County Communications Office and Information Technology Department, PDEQ staff launched a new website, www.pima.gov/HealthyAir. The website URL is easy to remember and will be promoted on printed materials and advertisements. Content is structured with photos and images for easy recognition and linked to existing pages on ozone, particulate matter, sources of air pollution, protecting health, actions for healthy Air, the *Cut Down Pollution* lawn and garden program and the *Drive-Less Pledge*.

AIR QUALITY LIST SERVE

Staff maintains a list serve to share timely air quality and No-Drive Days information quickly with interested individuals. Emails are sent to this list serve when air quality is expected to reach unhealthy levels or when air quality related news releases or notices of community events are sent to the media. Staff encourages a voluntary reduction in motor vehicle use as part of the advisories as appropriate. The public can sign up for this list serve on the PDEQ website or list their names on sign-up sheets that staff provides at select outreach events.

ECO KIDS CORNER WEBSITE

Staff continued to promote the Eco Kids Corner website by distributing bookmarks at presentations or while tabling at community events. Debuted in January 2012, this kid-friendly website includes educational information regarding air quality, water, soil, climate change and reducing, reusing, and recycling. Kids can interact with a guessing game, create 13 different types of nature poems, and find additional resources for local eco-related activities, as well as discover a plentitude of resources for more information and engaging websites.

INFORMATION FOR PIMA COUNTY EMPLOYEES

As administrator of the Pima County Employee Travel Reduction Program (TRP) for approximately 7,000 employees, PDEQ staff shares resources and information and encourages all employees to adopt No-Drive Days practices in their work commutes by using transit, carpooling, vanpooling, skipping trips, combining errands, biking and walking. During this quarter, staff:

- Replied to inquiries regarding the use of alternate modes of transportation;
- Delivered travel reduction presentations and distributed resources at four New Employee Orientations;
- Registered four employees in the Guaranteed Ride Home Program for Pima County employees;
- Distributed alternate mode news and information via three employee newsletter articles;
- Promoted the Pima Association of Governments (PAG) Sun Rideshare resources via eScoop newsletter articles, website, and employee presentations;
- Contacted members of Travel Reduction Program alternate modes list serves, sharing timely news with those Pima County employees interested in transit (52 members), bicycle (86 members), walk (two members), and carpool and vanpool (10 members). Staff distributed messages on four occasions this quarter including information on transit detours, the annual TRP employee survey, interactive bike app and a bicyclist perception of safety survey by the University of Arizona.
- Maintained and updated the TRP intranet webpages providing resources and information about alternative modes of transportation and the benefits they provide;
- Maintained a Facebook group, *Commuter Trips and Tips* for Pima County employees and posted three messages to the group; and
- Distributed Survey Monkey surveys to new employees to assess the effectiveness of the TRP presentations and resources delivered during new employee orientations.

REPORTS OR DATA PRODUCED:

PDEQ & TRP WEBSITES

Staff tracks website pageviews using Google Analytics. During the second quarter of FY 2019-2020:

- Pageviews on PDEQ website: 28,239
- Pageviews on TRP webpages: 1,778

Articles Posted on PDEQ Website	
October 01, 2019	2019 Ozone Season "In-the-Books"
October 02, 2019	Air Quality Health Watch for Particulates from Smoke
October 31, 2019	Breathing Shouldn't Be Scary on Halloween
November 26, 2019	Fireplaces Heat Up As Temperatures Cool Down
December 30, 2019	New Year's Eve Activities Could Increase Air Pollution
December 31, 2019	Resolve to Drive Less and Smile More in 2020

Articles Posted on Travel Reduction Program Intranet Site	
Date	Comment Topic
October	Take the survey. Get some laughs!
November	Enjoy more time outdoors in cooler weather.

AIR QUALITY LIST SERVE

- Members on the Air Quality List Serve: 958
- Members on the Media list serve: 131
- Air quality-related informational piece distributed this quarter: 6

SOCIAL MEDIA MESSAGING

- Tweets posted on Twitter: 28
 - Impressions on Twitter: 30,500
- Pima County Facebook posts: 5
 - Impressions on Pima County Facebook: 2,977
- Facebook posts on Commute Trips & Tips: 3
 - Reach: 40 members x 3 posts = 120

HARD COPY MATERIALS DISTRIBUTION

- Pieces of literature and promotional materials distributed this quarter: 8,873
- Items authored by PDEQ and other agencies distributed: 81
- Occasions on which materials were distributed directly (In addition to distributing materials at booths and presentations) : 36
- People reached via materials distribution: 1,025

Materials Distribution			
Date	Location	# Events	# Recipients
2-Oct-19	Pima County Development Services	1	2
3-Oct-19	Stakeholder Meeting Pool/Spa Plan Review	1	15
4-Oct-19	UofA, Tucson Clean & Beautiful, City Tucson	1	5
7-Oct-19	Pima Association of Governments	1	4
9-Oct-19	Suffolk Hills Property Owners Association	1	20
10-Oct-19	Pima County buildings, kiosk reload	1	15
11-Oct-19	Stairwell Gallery	1	10
11-Oct-19	Pool/Spa Plan Review	1	4
11-Oct-19	Pima County Health Department	1	25
11-Oct-19	PC Health Dept. Green Committee	1	25
15-Oct-19	Pima County Facilities Tenants	1	40
15-Oct-19	Tucson Unified School District	1	1
16-Oct-19	City of Tucson	1	15
18-Oct-19	AZ Dept. of Environmental Quality	1	12
21-Oct-19	Downtown Tucson Partnership	1	50
31-Oct-19	Pima County buildings, kiosk reload	1	15
5-Nov-19	Downtown Tucson Partnership	1	100
6-Nov-19	K•mel Design	1	1
19-Nov-19	Silverbell Dental	1	30
19-Nov-19	Elliot's Restaurant	1	50
20-Nov-19	PDEQ Lobby	1	1
21-Nov-19	Pima County buildings, kiosk reload	1	14
22-Nov-19	Pima County Health Department	1	3
26-Nov-19	PDEQ staff	1	1
26-Nov-19	Pima County Fleet Services	1	6

6-Dec-20	Downtown Tucson Partnership	1	100
9-Dec-20	Pima County Fleet Services	1	100
12-Dec-20	Tucson Recycling and Waste Services	1	8
16-Dec-20	Home Depot	1	60
16-Dec-20	City of Tucson Los Reales Landfill	1	4
17-Dec-20	TRP Kiosk reload	1	9
17-Dec-20	NRPR - Living River of Words	1	75
19-Dec-20	Pima County Health Dept. Eco Nook	1	150
19-Dec-20	Pima County Health Dept. Bike Ambassador Program	1	3
20-Dec-20	33 N. Stone Ave Lobby	1	50
27-Dec-20	Tucson Estates II	1	2
	TOTAL	36	1,025

• **GOAL 7: USE OF SOCIAL MEDIA PLATFORMS -----**

VNDD/Clean Air Program staff posts videos, photos, or text messages on Twitter, Facebook and YouTube to reach inter-generational audiences regarding No-Drive Days messaging.

PERCENT OF WORK COMPLETED: 40%

WORK ACCOMPLISHED:

TWITTER

PDEQ’s first tweet on Twitter.com was on July 21, 2015. This quarter, staff tweeted 28 posts focused on air topics including:

- Idle reduction
- Take action to reduce air pollution
- Cyclovia
- Air quality levels
- Find air pollution levels for children’s health
- Beautiful clean skies
- Fire smoke
- Sign up for air quality advisories
- Benefits of driving less
- Carpooling
- Wind and elevated particulates
- Free PDEQ presentations
- Healthy air and mountain views
- Check tire pressure for healthy air

FACEBOOK

• **Pima County Facebook**

The Pima County Communications Department provided five posts on Pima County’s Facebook account this quarter on the following subjects:

- Vehicle exhaust from idling while Trick-or-Treating
- Cyclovia Tucson
- Video on higher levels of particulates on New Year’s Eve
- Fireplace smoke
- Use bikes for a car-free commute

• **Travel Reduction Program Group**

In May 2017, staff established a Facebook group for Pima County employees, *Commute Trips and Tips*, as a way to reach employees regarding driving less and using alternate modes of transportation for work commutes. There are currently 40 members in this group. This quarter, staff posted four messages regarding:

- Annual TRP employee survey
- Cyclovia Tucson
- Pueblo Express (Sun Link Streetcar)
- Using alternate modes provides long-term health benefits (SHRM report)

YOUTUBE

In previous years and with the assistance of Pima County Communications, PDEQ produced and posted six public service announcements related to air pollution and actions people can take for healthier air. These videos are all currently active on YouTube.

REPORTS OR DATA PRODUCED:

TWITTER

Quarterly impressions on Twitter have increased from 215 in the first quarter we began tweeting in 2015.

- Air quality related tweets this quarter: 28
- Impressions this quarter: 30,500
- Followers: 947
- Following: 601

PIMA COUNTY FACEBOOK

- Facebook posts this quarter: 5
- People reached: 2,828
- Impressions: 2,977

COMMUTE TRIPS & TIPS FACEBOOK GROUP

- Facebook posts this quarter: 4
- Members in *Commute Trips and Tips*: 40

YOUTUBE VIDEO VIEWS

Views to-date are listed below and are cumulative from original upload date.

- *Idle Less*
 - 15-second version (uploaded May 2018): 34 views
 - 40-second version (uploaded April 2018): 238 views
- *Help keep particles out of the air this New Year's*
 - English version (uploaded September 2017): 51views
 - Spanish version (uploaded September 2017): 44 views
- *Love the Air* (uploaded April 2015): 636 views
 - *Love the Air* also plays in a video loop on at least one monitor located in a downtown county-owned building for people to view while they are waiting in the lobby.
- *Idle Less at Schools*
 - Draft version (uploaded in April): 200+ views
 - Final version (updated May 2019): 67 views

● GOAL 8: HEALTHY AIR IS IN OUR HANDS DRIVE-LESS PLEDGE -----

This on-going program encourages the public to take the *Drive-Less Pledge* and commit to reducing miles traveled by motor vehicles.

PERCENT OF WORK COMPLETED: 50%

WORK ACCOMPLISHED:

Drive-Less Pledge cards are distributed and an online form is available on PDEQ’s website inviting Pima County residents to commit to specific actions leading to driving less. Data is collected and analyzed to track the number of participants, pledged miles not driven and associated emission reductions.

The pledge is promoted at outreach events and on the PDEQ website. Each quarter one lucky participant wins a \$100 Visa gift card via a random drawing.

REPORTS OR DATA PRODUCED:

DRIVE-LESS PLEDGE QUARTERLY OUTCOMES:

- Pledge cards distributed this quarter: 798
- Healthy Air Is In Our Hands bookmarks distributed: 56
- People pledged to drive less this quarter: 553
- Miles contest participants pledged to not drive during this quarter: 211,900
- Pounds of air pollution and greenhouse gases reduced this quarter: 181,111

• GOAL 9: COMMUNITY EVENT OUTREACHES -----

Staff provides visually stimulating, interactive displays to entice interest and engage audiences, providing information on ozone and actions that prevent air pollution, including No-Drive Days.

PERCENT OF WORK COMPLETED: 30%

WORK ACCOMPLISHED:

Staff tabled at five community activity and resource events during the second quarter.

REPORTS OR DATA PRODUCED:

Booths			
Date	Location	# Events	# Attendees
27-Oct-19	Cyclovia	1	40,000
18-Nov-19	Pima County City of Tucson Wellness Fair	1	400
23-Nov-19	Tucson Poetry Society	1	24
12-Dec-20	Butterfield Elementary STEAM Night	1	100
14-Dec-20	Wakefield Family Resource Center	1	40
	TOTAL	5	40,564

• GOAL 10: NEWS RELEASES & MEDIA EXPOSURE -----

Staff worked with the news media to promote No-Drive Days activities, inform the public regarding air quality status, and encourage actions to reduce emissions. News releases were distributed to the media including KOLD, KVOA, KGUN, Fox 11, AZ Public Media, various radio stations, and the Arizona Daily Star, and to individuals on our air quality advisory list serve.

PERCENT OF WORK COMPLETED: 52%

WORK ACCOMPLISHED:

NEWS RELEASES TO MEDIA:

Staff developed and distributed seven news releases this quarter, including one Air Quality Watch for particulates, an announcement that ozone season ended, Cyclovia Tucson, idling less for healthy air,

smoke from fireplaces, temporary increase in particulates on New Year's Eve and driving less and smiling more in 2020.

AIR INDEX NOW INFORMATION:

The media can obtain real-time Air Quality Index (AQI) information from PDEQ's website, www.pima.gov/deg. This information is published daily in local newspapers and on media websites. In addition, KVOA-TV, KOLD-TV, and KGUN-TV news programs normally incorporate the AQI into their weather report when advisories occur. The media can also access AQI data and five-day air quality forecasts from ADEQ.

NEWS STORIES:

At least 17 news stories or announcements related to No-Drive Days messaging reached thousands of community members via a variety of news stations, websites, newspapers, and newsletters.

REPORTS OR DATA PRODUCED:

News Releases	
Date	Title
1-Oct-19	2019 Ozone Season "In-the-Books"
2-Oct-19	Air Quality Health Watch (particulates)
25-Oct-19	123 Activities and Culinary Destinations to Check Out this Sunday During Cyclovia Tucson (LSA distributed)
31-Oct-19	Breathing Shouldn't Be Scary on Halloween - - Idle Less for Healthy Air
26-Nov-19	Fireplaces Heat Up as Temperatures Cool Down
30-Dec-19	New Year's Eve Activities Increase Air Pollution in the Tucson Area
31-Dec-19	Resolve to Drive Less and Smile More in 2020

Media Exposure via TV, Radio, Print, Outdoor Advertising and Publicity		
Date	Publication/Station	Description
1-Oct-19	KOLD.com	Fire burning near San Xavier Mission will continue to send smoke over parts of Tucson
2-Oct-19	gvnews.com	Pima County issues air pollution health watch due to hay fire
2-Oct-19	pima.gov	Air Quality Health Watch for Particulates from Smoke
2-Oct-01	pima.gov	2019 Ozone Season "In-the-Books"
2-Oct-19	KVOA TV news	Hay fire contained, firefighters letting fire burn out on Tohono O'odham Reservation
3-Oct-19	FOX Television	Smoke lingers from hay fire in southern Arizona
3-Oct-19	Arizona Daily Star	Hay fire burning near Mission San Xavier del Bac will continue for days, officials say
October 2019	Arizona Bilingual Magazine	Cyclovia Tucson
October 2019	Zocalo Magazine	Cyclovia Tucson
October 2019	cycloviatucson.org	Cyclovia Tucson information, PDEQ CAP listing, Cinco for Cyclovia station, and sponsor logo
October 2019	Pima County eScoop Newsletter	TRP News: Take the survey. Get some laughs!
25-Oct-19	Pima County FYI weekly newsletter	Calendar Best Bets: Cyclovia
31-Oct-19	KOLD TV News 13	PDEQ CAP suggests turn off vehicle and walk instead of idling vehicles.
31-Oct-19	KVOA.com	Healthy air quality encouraged for Halloween in Pima County
13-Nov-19	Green Valley News	GPS trackers see Pima County employees driving fewer -and safe- miles
22-Nov-19	Arizona Daily Star	Photos: Students take part in annual Arizona STEM Adventure, PDEQ staff speaking about air quality
November 2019	Pima County eScoop Newsletter	Enjoy more time outdoors in cooler weather
December 2019	Green Living Magazine	Fireplaces Heat Up as Temperatures Cool Down
December 2019	Pima County eScoop Newsletter	Tis the season to give your car a holiday

GOAL 11: PROGRAM EVALUATION -----

The Voluntary No-Drive Days/Clean Air Program is evaluated in the spring annually as well as throughout the year to assess effectiveness of the outreach and services the program provides.

PERCENT OF WORK COMPLETED: 25%

WORK ACCOMPLISHED:

YOUTH & ADULT PRESENTATION SURVEYS

Surveys are distributed at or after presentations, as appropriate, to evaluate the effectiveness of the presentation in informing and encouraging no-drive actions among attendees. One evaluation was returned this quarter from the facilitator of an air quality presentation to an active adult community group in Sun City, Oro Valley.

TRAVEL REDUCTION PROGRAM SURVEYS DISTRIBUTED

- **New Employee Orientation Evaluations**

Staff received 64 evaluations from Pima County employees attending the Travel Reduction Program presentation at New Employee Orientations. These surveys are distributed by the Human Resources Department.

- **Survey Monkey Evaluations**

Staff distributed short on-line surveys to Pima County employees who attended Travel Reduction Program presentations at recent New Employee Orientations. Designed to determine employee commute modes of choice, the survey is distributed every month to attendees of presentations held one month prior. The delay provides employees an opportunity to establish commute habits and acts as a timely reminder for those who have not chosen to use them to consider alternate modes for their future work commutes.

ANNUAL EVALUATION OF THE VNDD CLEAN AIR PROGRAM

The annual evaluation of our outreach and education program will take place in the fourth quarter.

REPORTS OR DATA PRODUCED:

ADULT PRESENTATION SURVEYS

On a scale of 1 to 5, where 1 is “Low” and 5 is “High”, the effectiveness of the presentation ranked:

- Increasing attendees’ knowledge of environmental issues: 5
- Encouraging action to reduce air pollution: 5

Comments:

- *Karen’s presentation was very well done. The audience participants asked questions throughout, so people were engaged. The graphs were easy to understand and the videos were fun.*
- *People were very pleased and we received many positive comments as they departed. There were also a few “thumbs up” as they left. Great “give aways” too!*

NEW EMPLOYEE ORIENTATION EVALUATIONS

Overall, the topic is relevant to participants, presentations were clear, and the quality of the presentation materials either exceeded or met the expectations of the attendees. Of the 64 Pima County employees submitting evaluations, several made comments regarding the Travel Reduction Program presentation. Comments include:

- *Fun and high energy.*
- *Great energy.*
- *Sometimes hard to hear (from the back)*
- *She was very sweet and insightful.*
- *High energy presenter.*

- *Wow! Great presenter, and her enthusiasm is infectious.*
- *Loved her energy!*
- *Most of my job is outreach so we have to drive.*
- *I've never worked at a place I could take mass transit or long term car pooling.*
- *Very good.*
- *Very energetic. Love it.*
- *Skye was very upbeat and made it very fun!*
- *High energy speaker.*
- *Awesome energy! We all need to power walk!*
- *Love her energy.*

TRP SURVEY MONKEY SURVEYS OF NEW PIMA COUNTY EMPLOYEES

When asked what modes of transportation participants use for their work commutes at least one day per week, alternate modes including transit, carpool, bike and walk represent 44% of those trips.

- Surveys distributed to Pima County employees this quarter: 111
- Responses received: 29 (26% response rate)
- Vehicle miles traveled avoided per year by these respondents: 22,100
- Pounds of air pollution and greenhouse gases reduced per year: 18,889

Fourteen respondents also left comments while taking the survey this quarter, including:

- *It provides other options. I hope to use one of those options in the future.*
- *I thought the presentation was great. I noticed that there were parking discount incentives for carpool and reduced bus fares for bus riders. If the goal is to improve air quality, I would suggest parking discounts also be offered to electric car owners, and possibly hybrid owners as well. If the goal is to cut down on the amount of parking spots being used, then no incentive would be needed for those drivers.*
- *I appreciated the complimentary SunGO cards so I could try out the bus and streetcar and figure out what would work for me.*
- *Perfect.*
- *It did inform me of alternatives to consider if my circumstances change.*
- *Sadly, there are no bus stops that are remotely proximal to my home, so looking into vanpool/carpool options.*
- *I do not own a car.*
- *If I was able to move closer to the downtown area I may be able to take alternate modes of transportation. If we knew of the real estate closer to our locations this would be helpful.*
- *I just wish I lived in town where I would be able to partake in the alternate routes!*
- *The documentation was fine, but setting up the subsidy program was a pain. Not to mention that there was an error in the HR benefits page. But a clear clean detailed documentation of step by steps will help future people who want to join the program. Otherwise I found it stressful and I had to send out a lot of emails just to find the right people to figure it all out. (Everyone was mostly nice but this would help to reduce stress for all parties.) Also if there already is a step by step guide, I either read it and it wasn't complete or it is not in an easily accessible location. Thank you!*
- *Helping to navigate the SunGo vs. SunTran website would be helpful. Also, help understanding the schedules and routes. The SunGO card helped a lot! It let me try the bus without committing.*
- *It was informative especially for someone who may be both new to the job and new to Tucson.*
- *Waiting for over a month for a discounted bus pass is inconvenient. Even then, it doesn't seem that the pass can be counted on - no money for my bus pass was deducted from my check this month. If I'm unable to obtain one for December after following the procedure properly and waiting almost 6 weeks after my hire date, I'll probably just start driving as the full fare is comparable to parking fees. Good intentions, but this program seems poorly administered.*
- *Thank you!*

GOAL 12: RESEARCH EMISSIONS REDUCTIONS METHODOLOGIES -----

Staff is available to participate in conference calls or meetings with ADEQ and TRP agencies to discuss methodologies that calculate emission reductions and benefits that result from VNDD activities.

PERCENT OF WORK COMPLETED: 50%

WORK ACCOMPLISHED:

MEETING WITH ADEQ

Staff participated in an in-person meeting at ADEQ on October 18 with Maricopa County, Pinal County, Valley Metro, and the Pima Association of Governments for a sharing session about each entities' programs. Discussion included work commute options that may increase employee quality of life and act as employee satisfaction and retention, increasing survey response rates, the need to make promotions personal, focusing messaging on health associated with air quality, and reference to Maricopa County's *Commit to One Day* campaign.

Staff also met with ADEQ contract managers on October 21 to discuss the VNDD/Clean Air Program.

PUBLIC OUTREACH CONFERENCE CALL

Staff participated in a National Association of Clean Air Agencies conference call on October 10 regarding *Tools and Strategies for Authentic Community Engagement*. Presenters provided information on connecting with the public by building relationships and engaging in shared leaderships. They stressed the need for "radical hospitality" by providing child watch services, refreshments, transportation reimbursement and working with stakeholders to set the agendas for meetings.

They discussed providing funding for projects that protect public health such as school air filtration systems and providing grants for community projects. Youth conference and scholarship programs, building local coalitions between agencies and residents, and adhering to community-led principles in developing strategies and programs are additional topics discussed at this call.

No presenter or listener could provide resources when PDEQ staff asked if anyone was using metrics that measures the effectiveness of outreach and education in reducing vehicle miles traveled.

GOAL 13: DECREASE NUMBER OF VEHICLE MILES TRAVELED IN PIMA COUNTY ---

Staff gathers data from surveys, contests and databases administered and/or promoted by VND program to estimate the reduction in vehicle miles traveled associated with the program. The goal for this fiscal year is to decrease vehicle miles traveled by 1.75% in Pima County.

PERCENT OF WORK COMPLETED: 50%

WORK ACCOMPLISHED:

Of eight survey instruments attempting to measure vehicle miles reduced related to VNDD outreach, data is available for six items this quarter. More data from other metrics will be available as we progress through the fiscal year.

REPORTS OR DATA PRODUCED:

Vehicle Miles Reduced • VNDD Programs FY 2019-2020					
Program	Q1	Q2	Q3	Q4	Total
Healthy Air Is In Our Hands	130,651	211,900			342,551
Annual CAP Survey ^A					-
Annual TRP Survey Pima County employees ^B		2,239,744			2,239,744
PC Employee NEO Survey ^C	10,250	22,100			32,350
Guaranteed Ride Home - PC employees	100,724	109,954			210,678
Tire Inflation Education Program ^D					-
Cyclovia Participants Car-Free Day ^E		304,250			304,250
Transit Pass Use by Pima County employees	308,077	279,185			587,262
TOTAL					3,716,835

A. CAP Survey: data regarding work, school, shopping and leisure trips and % VND/CAP awareness used to estimate influence on miles not driven. Percent of total respondents aware of CAP.

B. Pima Association of Governments

C. New employees responding to survey and indicating how many miles they do not drive per week due to use of alternate modes. Annual miles extrapolated, assuming 50 weeks worked per year.

D. Annual CAP Survey, gallons reduced from proper tire inflation translated into miles reduced by dividing total gallons saved by 25.68 mi. (PAG, Cotty, 12/21/18) Percent of total respondents aware of CAP.

E. Federal Highway Administration Household Travel Survey Alternate Mode Trip Distance (with the assumption that most people biked to the event). 34.7% of Cyclovia Tucson participants (13,880) used alt modes on their trip to Cyclovia Tucson.