



**PIMA COUNTY DEPARTMENT OF ENVIRONMENTAL QUALITY
VOLUNTARY NO-DRIVE DAYS/CLEAN AIR PROGRAM • AGREEMENT NUMBER EV11-0067
QUARTERLY PROGRESS REPORT • APRIL 1, 2018 – JUNE 30, 2018**

PROGRAM EXPENSES -----

PERCENT OF WORK COMPLETED: 100%

Reimbursable Services Expense totaled \$89,869.66 and included:

- \$41,646.00 – Labor with Fringe Benefit costs in October, November and December:
 - \$30,234.95 – Labor expense
 - \$11,411.05 – Fringe Benefit expense
- \$27,643.81– Overhead
- \$823.81– Supplies: office supplies, gift card incentive for contest participants
- \$19,756.04– Other Miscellaneous: Advertising, promotional items, printing, motor pool

GOAL 1: COMMUNITY-WIDE EVENTS -----

PERCENT OF WORK COMPLETED: 240%

WORK ACCOMPLISHED:

BIKE FEST

VNDD staff promoted Bike Fest events to Pima County employees and encouraged the use of bicycles for work commutes instead of driving motor vehicles. Employees were invited to participate by biking anytime during April and logging bike trips in the Pima Association of Governments Sun Rideshare database, host their own bike event at their workplace, participate in Bike Week April 15-21, or commit to bicycling and entering the Healthy Air Is In Our Hands Drive Less pledge. Resources from The Pima County Bicycle and Pedestrian Program were also promoted.

Prizes donated by the Pima County Wellness program were distributed to everyone, and the top three riders who logged the most miles and top three riders who logged the most trips also received certificates of accomplishment. Prizes included a Loop Jaguar Jersey, salad shakers, insulated lunch bags and travel towels.

CYCLOVIA TUCSON

Cycloviva Tucson is a mobile, biannual free 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 is organized by the Living Streets Alliance (LSA) with support from VNDD and provides a venue for tens of thousands of people to practice and become comfortable riding bikes and walking throughout various neighborhoods. It is a highly popular event that enables individuals to become more confident alternate mode users without the obstacles that motor vehicle traffic can cause.

As a co-sponsor of the event, the PDEQ Clean Air Program logo was placed on promotional materials including flyers, website, and email blasts from the Living Streets Alliance. The PDEQ VNDD program

purchased advertising to reach a broad segment of our community and encourage event participation. The event was also promoted through social media and on the PDEQ website.

This spring event was on Sunday, April 8, 2018, with the 2.5 mile route reaching from Himmel Park to the Lost Barrio. PDEQ staff was stationed at Himmel Park and, due to sponsorship support, was a *¡Cinco for Cyclovia!* featured activity which helped to draw attendees to our booth. Staff provided multiple hands-on activities at the event including: *What on Earth Will I do*, *Spin and Learn*, *Healthy Air Is In Our Hands* pledge opportunity and informational literature for the taking.

The Living Streets Alliance estimates that 30,000 individuals attended the event.

HEALTHY AIR IS IN OUR HANDS

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

- Pledge cards and bookmarks distributed at outreach events.
- Posters displayed on the inside of Sun Tran busses and Sun Link Streetcar.
- Webpage on PDEQ website.
- 280 people pledged to drive less this quarter.
- Contest participants pledged to not drive 324,810 miles during this quarter, and for the year, participants have committed to avoiding driving 698,337 miles.
- Pollution and greenhouse gases reduced: 277,615 pounds this quarter; 596,869 pounds this year.

HEALTHY AIR RESOURCES OPEN HOUSE

Staff hosted an air quality open house event on June 9, 2018 at the Chuck Bowden Mt. Lemmon Community Center in Summerhaven to educate community members and visitors. This community has great concern of air quality issues, especially due to Mt. Lemmon's history of the 2003 Aspen Fire, which burned 340 homes and businesses and scorched over 84,000 acres.

Staff conducted a few brief air quality presentations, and engaged visitors with free, fun, family-friendly educational activities and literature on lung health, wildfires and air pollution prevention, including an information card developed by staff, *Assessing Smoke in Our Air*. Staff educated participants on available healthy air resources to keep the desert and mountain air healthy to breathe, with opportunities to sign up for air quality advisories, ADEQ 5-Day Air Quality Forecasts, Healthy Air Drive Less Pledge, and learn more about air monitoring data and fire season preparation.

Staff collaborated with the Board of Supervisors District #4, Pima County Natural Resources, Parks and Recreation, and Pima County's Communications Department to implement an outreach action plan to promote the open house. A newsletter article was distributed via Pima County's website and social media. A promotional flyer was also created and shared through the Coronado National Forest's Sabino Canyon and Palisades Visitor Centers, Bear Canyon Library, Mt. Lemmon's Post Office, local businesses and Rose Canyon Campground.

TUCSON EARTH DAY FESTIVAL

As part of the Tucson Earth Day Festival planning committee, staff worked with other community partners to continue preparing for and hosting the event on Saturday, April 21, 2018 at the Children's Museum Tucson and adjacent Armory Park. The committee is comprised of employees of Bear Essential News, City of Tucson, Pima County, Kinder Morgan, Children's Museum Tucson, Raytheon, and retired citizens. PDEQ was a Gold Sponsor of the event, and the PDEQ logo appeared on promotional posters, cards and announcements.

As the volunteer coordinator, staff recruited and organized volunteers to help operate the event and acquired food donations to feed volunteers snacks, drinks and lunch. Of the 70 volunteers who signed up, 61 appeared to assist with a variety of tasks including transporting exhibitor supplies, setting up and taking down booth space, picking up trash, managing recyclable and compost materials at Eco Stations, parking bicycles, serving lunch, offering water to exhibitors, and conducting participant surveys. Prior to the event, staff also secured availability of bike racks for the Bike Valet station, offered opinions on promotional efforts, and provided feedback during committee meetings.

Staff also provided an interactive, educational display booth at the event to share information about air quality and No-Drive Day actions to help reduce motor vehicle emissions. An estimated 3,500 individuals attended the event.

USE THE LOOP FOR YOUR COMMUTE PROJECT

This on-going program encourages no-drive days with The Loop, a non-motorized, multi-use pathway connecting communities within metropolitan Tucson. After targeted outreach to 76 major businesses within one half-mile of the facility in FY 2016-2017, staff continues to fill Loop literature and map orders and promote The Loop to businesses and the general public. At a minimum, the Loop is discussed and the promotional flyer is available at new employee orientations for Pima County employees throughout the year.

WALK 'N BIKE TO SCHOOL DAY

This Pima County sponsored event is held twice a year to encourage no-drive days; active ways for children to get to and from school; improve air quality around schools and in neighborhoods; reduce driving and associated congestion; and to promote bicycle and pedestrian safety. The spring event was held on April 6, 2018. Staff:

- Worked with Pima County Department of Transportation (PCDOT), major sponsor of the event;
- Purchased scooters for participant prize incentives at more than 50 schools;
- Worked with the Pima County Superintendent of Schools to distribute event information to all public, private, and charter schools; and
- Forwarded the news release by PCDOT to PDEQ's air quality list serve.

In addition, PDEQ's department name appears on the promotional flyer and was recognized as a sponsor and provider of outreach/education services in the news release encouraging schools to sign up.

SUPPORTING COMMUNITY PROGRAMS TO ENHANCE NO-DRIVE DAY GOALS

VNDD staff works with many local groups to incorporate No-Drive Day 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. The forecasting services became available to the public mid-September 2017. It is intended to not only provide health 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 keep air quality in a healthy range when it is forecasted to be unhealthy.

The forecasting has proved to be helpful for VNDD staff and provides information that we can include in our air quality advisories, including where the pollution is coming from and weather

patterns that are affecting air quality. It is especially helpful towards the end of the work week for potential weekend warnings.

VNDD staff promoted the forecasting service at outreach 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 monthly 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. VNDD program staff worked with LSA regarding the spring Cyclovía event (mentioned above) and the Bike Valet Program.

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; and
- During this quarter, the Bike Valet was available at four venues: Tucson Earth Day Festival, Cultivate Market, Heirloom Farmer's Market and Baja Beer Festival. A total of 210 bikes were parked during these events. Survey questions were asked of participants. Ninety-one percent of respondents indicated that if bike parking service was not available, they would not have driven to the event. Ninety-nine percent of respondents indicated that they still would have attended the event even if the bike parking service was not available. LSA reported that 16 car trips were avoided.

- **Love to Ride, National Bike Challenge**

Staff promoted the National Bike Challenge to Pima County employees and encouraged folks to join teams and ride bikes for transportation and recreation during the month of May. Thirty-eight individuals joined six teams organized by Pima County employees: Crash Bandicommeters, Doctor Neo Cortex, PC Riders, Pima County Commuters, Pima County Pedalers, and The Love Handles. Prizes donated by the Pima County Wellness Program along with some Clean Air Program swag were distributed to participants. Ten certificates of accomplishment were also awarded to the top four riders with the highest miles ridden, and to those riders who earned at least 500 day points, meaning they rode the most number of days during the month of May.

- **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 issues and include a health impact statement to protect public health. When NWS issues dust 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:

- 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, Travel Reduction Program Enforcement Agency for companies located in unincorporated areas of Pima County.
- Travel Reduction Program: 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 promoting PAG Sun Rideshare contests and resources.
- Access to Sun Rideshare Data: PAG provided data on Pima County employee use of bicycles during the month of April, Bike Fest month. The data was acquired in May. PAG also provided a quarterly report on alternate mode trips logged on the database by Pima County employees, with associated vehicle miles traveled and air pollution reductions.

- **Pima County Government Departments**

Communications Office

- Staff worked with graphic designers and communications specialists on a variety of projects including articles, news releases, updates to the Little Green Riding Hood book, a new poster *How is Ground-Level Ozone Pollution Formed?*, and continued to develop artwork and plans regarding ground-level ozone outreach.

Human Resources

- New Employee Orientations: Provided Travel Reduction Program presentations and informational literature about alternate modes of transportation to new employees. Four presentations were delivered this quarter, reaching 117 attendees.
- Bus Pass Sales: 967 bus passes were sold to Pima County employees this quarter via the HR Benefits program.

Natural Resources, Parks & Recreation

- Staff provides educational literature at an environmental education center, Desert Discovery Center, which serves to inform environmental educators and families about sustainability topics and regionally significant ecological issues relating to the desert environment and wildlife corridors, including water and air quality.

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.
- The team is working on projects to reduce emissions by decreasing employee vehicle idling and providing services to make using alternate modes more amenable. Plans are in the making to implement an idle reduction program that will encourage employees to idle less, and includes utilizing GPS data reports on vehicle idling duration.
- Staff helped to facilitate an article about *Skype for Business*, to encourage Pima County employees to consider this electronic meeting venue instead of driving motor vehicles to attend meetings in person, when feasible.

Public Libraries and Community Centers

- Some time 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 provide literature as requests are made.
- Staff previously provided master copies of some flyers to librarians to photocopy and resupply themselves with eco-literature customized to the specific interest of their library patrons. This also frees up PDEQ staff time and resources. On average, staff sends fresh supplies of printed materials once or twice per year.

Transportation/Health Department

- The Bicycle and Pedestrian Program moved from the Department of Transportation to the Health Department, who is in the process of assessing its programs and operations. Staff worked with the new program manager to update contact information and bike-share details on the Travel Reduction Program intranet website.
- Walk 'N Bike to School Day: Co-sponsor. The spring event was held on April 6, 2018. VNDD purchased scooters to use as incentives for school and student participation. Approximately 25,000 students at nearly 50 schools were exposed to information providing the benefits to walking and biking to school.
- Bicycle and Pedestrian Program: Promoted bike safety classes, on-line and paper maps of bike routes and The Loop non-motorized pathway, bike bell and children's helmet give-away events, and related literature with the general public, major employers and Pima County employees.

• 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.
- *Healthy Air Is In Our Hands, Drive Less* campaign: Interior bus posters continue to be displayed in Sun Tran busses. External Supertail bus advertisements were purchased for display on the back-end of busses in March and April.
- Staff met with Sun Tran staff to discuss improving ridership by Pima County employees, and arranged to receive free value added transit passes to encourage individuals to try transit with the hopes that they will continue riding transit for work commutes. The passes will be distributed during new employee orientations and during transit promotion events in the future.

• Tucson Audubon Society

- Desert Dwellers Education Project: PDEQ staff continued to collaborate with Tucson Audubon Society to distribute the desert conservation poster and promotional bookmark, *Desert Dwellers Know – A Celebration of Byrd's Words* and other VNDD literature.
- A companion coloring and activity book, *Desert Dwellers Know Desert Colors*, is also being distributed through the Society. 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.

• Tucson Clean & Beautiful

- Staff sits 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**
 - Staff facilitates an internship Affiliation Agreement between PDEQ and the University of Arizona, providing information to students, conducting interviews, and developing project ideas. Staff acts as preceptors to students as they work on a variety of projects benefitting the department, the community and the VNDD program.
 - Staff worked with one intern during the spring semester. As her main project, the intern developed a storyboard for a video designed to educate viewers about ground-level ozone: what it is, sources of it and how it is formed, health effects from breathing it, and solutions to reduce this pollutant. The project was discussed with videographers in the Pima County Communications Office and was put on hold until the fall, when students return to the University and the weather is more agreeable in which to work.

REPORTS OR DATA PRODUCED:

Emissions reduction from Healthy Air Is In Our Hands Campaign:

Contest participants pledged to not drive 324,810 miles during this quarter, and for the year, participants have committed to avoiding driving 698,337 miles. Pollution and greenhouse gases reduced: 277,615 pounds this quarter, and 596,869 pounds throughout the year.

Emissions reduction from Pima County employee use of bicycles:

- **Bike Fest** – Twenty-nine Pima County employees participated in Bike Fest, logging 663 bike trip segments on the Pima Association of Governments Sun Rideshare database. If all those bike trips replaced motor vehicle miles, it would have reduced vehicle miles traveled by 3,593 and reduced air pollution by about 2,820 pounds.
- **Love to Ride National Bike Challenge** – Collectively, team members rode 7,547 miles, and if those miles replaced car trips, it would have reduced air pollution and greenhouse gases by 6,450 pounds.

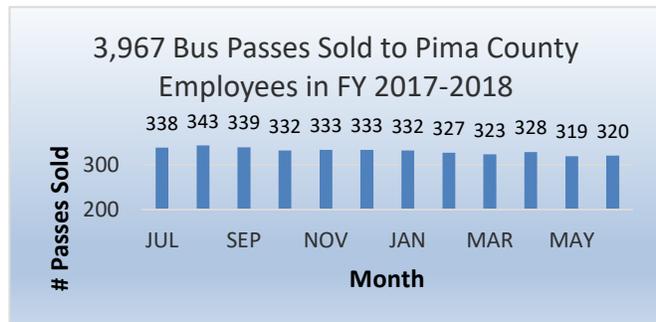
Emissions reduction through monthly Sun Rideshare Rewards Program:

Staff received data regarding Pima County employees who entered their alternate mode trips in PAG’s Sun Rideshare travel database in April, May and June 2018. There were 70 employees using a variety of alternate modes who submitted 2,661 daily commute logs during this quarter. According to PAG, total vehicle miles traveled were reduced by 49,311 miles, and air pollution and greenhouse gases were reduced by 38,703 pounds.

Emissions reduction from Pima County employee use of transit:

According to the employee survey conducted in October of 2017, we know that the average round-trip commute for Pima County employees is 25.4 miles. In this quarter, 967 transit passes were sold to Pima County employees, an average of 322 each month. If these employees were able to use transit an

average of three days per week (accounting for holidays, vacation days and days where driving is necessary), for the 13 weeks during this quarter they would have reduced driving by 318,973 miles and subsequently reduced vehicle emissions of air pollution and greenhouse gases by 272,627 pounds.



GOAL 2: PRESENTATIONS PROMOTING NO-DRIVE DAYS & REDUCED EMISSIONS-

PERCENT OF WORK COMPLETED: 103%

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.

REPORTS OR DATA PRODUCED:

Staff delivered 38 presentations directly related to no-drive days this quarter to youth and adult groups, reaching at least 1,105 individuals.

Presentations			
Date	Location	# Presentations	# Attendees
4-Apr-18	Green Valley Council	1	18
9-Apr-18	TRP Task Force	1	23
10-Apr-18	Board of Supervisors Intern and staff	1	2
12-Apr-18	Pima County New Employee Orientation	1	26
16-Apr-18	Mike Shaw live radio show	1	*
16-Apr-18	Pima Community College	1	7
17-Apr-18	Pima County Superior Court	1	12
18-Apr-18	Bill Buckmaster live radio show	1	*
2-May-18	Green Valley Coordination Council	1	16
3-May-18	Pima County New Employee Orientation	1	39
10-May-18	Robles Elementary School	2	70
10-May-18	Tucson Ministry Alliance Fountain of Life Church	1	60
18-May-18	Trinity Presbyterian Church	2	300
22-May-18	AZ Association of Environmental Professionals	1	17
23-May-18	Mike Shaw Radio Show	1	*
24-May-18	Pima County New Employee Orientation	1	25
24-May-18	Our Savior's Lutheran Church	1	50
3-Jun-18	St. Francis in the Foothills Church	1	75
6-Jun-18	Valencia Library	1	20
8-Jun-18	Trio Upward Bound Program	2	25
9-Jun-18	Mt. Lemmon Community Center	4	50
13-Jun-18	UofA Wildcat Reporter	1	1
14-Jun-18	Pima County New Employee Orientation	1	27
14-Jun-18	NW YMCA Summer Camp	4	109
15-Jun-18	Trio Upward Bound Program	2	25
20-Jun-18	Catalina Community Center	1	40
21-Jun-18	Pima Council on Aging	1	60
25-Jun-18	Tikkun Community	1	8
	Total	38	1,105

* Listener data not available

GOAL 3: DEVELOPMENT OF EDUCATIONAL & PROMOTIONAL MATERIALS -----

PERCENT OF WORK COMPLETED: 222%

WORK ACCOMPLISHED:

50 WAYS TO GREEN THE EARTH POSTER

Staff worked with the Pima County Communications Office Print Shop to reprint this popular poster for distribution at presentations and other outreach events.

ARTICLES WRITTEN

eScoop Newsletter

Staff wrote three articles for the on-line newsletter for thousands of Pima County employees to read. The articles provided information about Bike Fest month, National Bike Challenge, ground-level ozone, SummerGO youth transit pass, the Healthy Air "Drive-Less" Pledge, PAG Sun Rideshare rewards, free emergency ride home, and an opportunity to sign up for a list serve to receive information on alternative mode news.

Natural Awakenings

An article entitled *Idle Hands & Idling Engines* was written by PDEQ staff and published in the April 2018 issue of *Natural Awakenings*, a free paper and on-line magazine distributed to thousands of residents in Pima County. The article included facts about idling vehicles and tips to reduce vehicle idling to help protect air quality and human health.

PDEQ Internet

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

Spring Community Quarterly

An article entitled *Early Return of Ground-Level Ozone Season Possible* was written and published in the *Spring Community Quarterly*, a publication distributed by KGVY1080/100.7FM. The article provided information on ground level ozone, how close Pima County is to the U.S. EPA national standard, how health standard violations are determined, health effects of breathing ozone, who is most at risk, and how sensitive individuals can protect their health.

CYCLOVIA

As a financial sponsor, the PDEQ Clean Air Program logo was placed on promotional pieces for the spring Cyclovia event including a poster, flyer, emails, and website.

DESERT DWELLERS KNOW RESTAURANT KID'S MENU

Staff edited the *Desert Dwellers Know* menu/activity sheet artwork to include menu items of the Sundance Café and Epazote, restaurants at the El Conquistador Hilton Resort. The menus in two size formats (8.5"x11" and 11"x17") were emailed to the restaurant director for review. Information and activities on the menu/activity sheet focus on ground-level ozone education and include facts about air pollution, a maze, fill-in-the-blank, word search, number puzzle, images to color, and action tips for readers to reduce vehicle emissions and air pollution. The larger format sheet also includes *Kids vs. Adults*, a game where children and parents take turns quizzing each other about air information.

HOW IS GROUND-LEVEL OZONE POLLUTION FORMED? POSTER

To create greater public awareness about ground-level ozone, staff worked with the Communications Office to develop a new poster. Two posters were printed. One is laminated and sits on a table-top display. The other is laminated and mounted on a lightweight sturdy board to use as a stand-alone educational piece. The poster illustrates how ozone is formed, provides action item tips to reduce ozone levels, and provides contact information for further inquiries.

IDLE LESS PUBLIC SERVICE ANNOUNCEMENT

Staff worked with Pima County Communications and a past University of Arizona student intern to develop this video promoting vehicle idle reduction and approved the final version which was published on YouTube in April. A link to the video is also posted on PDEQ's Public Service Announcements webpage, and it is also used in presentations.

LITTLE GREEN RIDING HOOD BOOK

With the need to reprint more *Little Green Riding Hood* books, staff took the opportunity to tweak some details to be more in-line with current household practices. In the book, originally printed in 2009, the grandmother and girl had been suggesting the use of compact fluorescent lightbulbs (CFL) to be more energy-friendly. Staff worked with artists in the Communications Office to replace text associated with CFL to that talking about a light emitting diode light bulb (LED) instead. (Before a previous reprint, we had an artist change the artwork from a CFL to LED, and neglected to have them edit the associated text.)

An electronic version of the book was also developed by the Communications Office, and is now available on a new PDEQ [webpage](#).

OPEN HOUSE: HEALTHY AIR RESOURCES FLYER

A promotional flyer was created for a unique open house event staff organized and held at the Chuck Bowden Mt. Lemmon Community Center on Saturday, June 9. Flyers were posted at key locations to maximize exposure, including: Rose Canyon Campground, Palisades Visitor Center, U.S. Post Office, General Store and restaurants.

PROMOTIONAL ITEMS

Staff purchased recycled content pens, mechanical pencils, fan/flyers, decals and tote bags to give away to select audiences at outreach events. These items have *Drive Less, Idle Less* messaging and help to enhance our outreach efforts as people take and use these items in their homes and workplaces.

TUCSON EARTH DAY FESTIVAL PROMOTIONAL POSTER AND CARD

As a sponsor of the event, PDEQ's logo appeared on the Tucson Earth Day Festival poster and postcard, which were designed by City of Tucson and printed by Quik Print, other sponsors of the event.

WHAT ON EARTH DIRECTIONS AND PLEDGE CARD

To accompany the *What on Earth Can You Do?* interactive activity board that we use at some outreach events, staff developed directions for the activity to be displayed with the board in case people would like to engage as an independent endeavor.

Staff also developed a new *What on Earth Will I Do?* pledge that kids and adults can take to help protect healthy air. Participants can list the action items they pledge to take, sign and date the card.

GOAL 4: DISTRIBUTION OF EDUCATIONAL MATERIALS -----

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

PERCENT OF WORK COMPLETED: 114%

WORK ACCOMPLISHED:

PDEQ WEBSITE:

Staff continued to promote, update and maintain the PDEQ website, posting 17 new pages developed from news releases about air quality issues.

Articles Posted on PDEQ Website
April 04, 2018 – Pima DEQ to help celebrate Cyclovia this weekend
April 11, 2018 – Pima DEQ issues air quality health watch
April 12, 2018 – Pima Environmental Quality issues air pollution advisory
April 13, 2018 – Join Pima DEQ at Earth Day and check out these Earth friendly tips
April 17, 2018 – Wind-blown particles block mountain views
April 19, 2018 – Pima DEQ encourages public to idle less for healthy air
April 23, 2018 – Pima DEQ issues air quality advisory for April 23
April 24, 2018 – PDEQ issues air quality advisory for April 24
May 11, 2018 – Strong winds, increased particulates prompt Air Pollution Watch
May 21, 2018 – Pima DEQ issues air quality advisory for May 21
May 23, 2018 – Money and air saving tips for Memorial Day
May 29, 2018 – Air Quality Advisory issued for May 29
June 15, 2018 – Keep stormwater clean by picking up after pets (healthy air mention)
June 20, 2018 – Air Quality Advisory issued for June 20
June 21, 2018 – Environmental Quality issues Air Quality Advisory for June 21
June 22, 2018 – PDEQ issues air quality advisory for third day this week
June 22, 2018 – Air quality exceeds EPA health standard

ECO KIDS CORNER WEBSITE:

Staff continued to promote the Eco Kids Corner website by distributing 542 bookmarks this quarter to public libraries, at presentations, and while tabling at community events. Debuted in January 2012, this kid-friendly website includes engaging and 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.

LIST SERVES:

Staff maintains list serves to share timely air quality and No-Drive Day information quickly with interested individuals.

- **Air Quality List Serve**

Staff issues air quality advisories to individuals on our Air Quality 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. There are currently 808 members on the Air Quality List Serve, 139 members on the Media list serve and 18 air quality-related informational pieces were distributed to them this quarter.

- **Pima County Employee Alternate Mode List Serves**

Staff maintains list serves to share timely news with those Pima County employees interested in alternate modes of transportation: transit (57 members), bicycle (95 members), walk (two members), and carpool and vanpool (14 members). Staff distributed information on three occasions this quarter. Topics of the messages include promoting Bike Fest and the Love to Ride National Bike Challenge.

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 Day practices in their work commutes by using transit, carpooling, vanpooling, 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;
- Distributed alternate mode news and information via three employee newsletter articles;
- Promoted the Pima Association of Governments (PAG) Sun Rideshare Rewards Program via eScoop newsletter articles, website, and employee presentations;
- Emailed information to TRP listserves, Department Personnel Representatives, and PDEQ staff encouraging employees to participate in Bike Fest and the Love to Ride National Bike Challenge;
- Maintained the TRP intranet webpages providing resources and information about all alternative modes of transportation and the benefits they provide;
- Maintained a Facebook group, *Commuter Trips and Tips* for Pima County employees; and
- Distributed Survey Monkey surveys to new employees to assess the effectiveness of the TRP presentations and resources delivered during new employee orientations.

HARD COPY MATERIALS DISTRIBUTION:

Staff distributed 13,511 pieces of literature and promotional materials during this quarter. At least 107 different items authored by PDEQ and other agencies were distributed.

In addition to distributing materials at booths and presentations, staff also distributed literature and promotional items individually on at least 30 separate occasions reaching approximately 1,100 people.

Materials Distribution			
Date	Location	# Events	# Attendees
2-Apr-18	Pima County DEQ	1	40
6-Apr-18	Ray's Market	1	25
6-Apr-18	PDEQ Staff	1	1
11-Apr-18	Primavera Foundation	1	30
12-Apr-18	Nanini Library	1	150
18-Apr-18	Pima County Brown Bag	1	6
19-Apr-18	Pima County Clerk of the Board	1	5
19-Apr-18	Pima County Public Libraries	1	60
24-Apr-18	Pima County Facilities Management	1	100
25-Apr-18	PDEQ Staff	1	1
30-Apr-18	Regional Flood Control District	1	25
30-Apr-18	Pima Association of Governments	1	140
8-May-18	Pima County Facilities	1	100
29-May-18	Pima County Director's Meeting	1	10

30-May-18	Tucson Indian Center	1	1
1-Jun-18	Pima County Justice Court	1	2
1-Jun-18	Pima County Communications Office	1	12
4-Jun-18	Office of Emergency Management	1	10
8-Jun-18	Historic Y	1	25
11-Jun-18	Pima Association of Governments	1	25
15-Jun-18	Desert Discovery Center	1	50
15-Jun-18	PC Participants National Bike Challenge	1	34
22-Jun-18	33 N. Stone Lobby	1	10
23-Jun-18	Ending Poverty Now Program	1	20
25-Jun-18	Board of Supervisor's Office for Event	1	200
29-Jun-18	Healthy Air Is In Our Hands Contest Winners	4	4
29-Jun-18	Tucson Property Executives	1	18
	Total	30	1104

REPORTS OR DATA PRODUCED:

PDEQ Website:

Staff tracks pageviews to the PDEQ website using Google Analytics. During the fourth quarter of FY 2017-2018, 24,967 pageviews have been documented, with 92,857 pageviews documented for this fiscal year.



TRP Intranet Site:

Staff received data from Google Analytics reporting that there were 430 pageviews on the TRP intranet site during the fourth quarter, and 1,266 for the fiscal year.

GOAL 5: COMMUNITY EVENT OUTREACHES -----

Staff provides visually stimulating, interactive displays to entice interest and engage audiences, providing information that supports No-Drive Day resources and ideas.

PERCENT OF WORK COMPLETED: 112%

WORK ACCOMPLISHED:

Staff tabled at 11 community events this quarter reaching approximately 41,870 attendees with No-Drive Day messaging.

Booths			
Date	Location	# Events	# Attendees
6-Apr-18	LULAC	1	1000
8-Apr-18	Cyclovia	1	30,000
13-Apr-18	SARSEF	1	3000

14-Apr-18	Healthy Kids Day	1	1200
17-Apr-18	Geico Earth Day	1	1000
20-Apr-18	Davis Monthan Air Force Base	1	120
21-Apr-18	Tucson Earth Day Festival	1	3500
27-Apr-18	Tucson Clean & Beautiful RUMBA	1	200
9-May-18	Raytheon EHSS Fair	1	800
9-May-18	Sahuarita Middle School Career Day	1	850
11-Jun-18	Monsoon Safety Fair	1	200
	Total	11	41870

GOAL 6: NEWS RELEASES & MEDIA EXPOSURE -----

Staff worked with the media to obtain maximum coverage of the voluntary No-Drive Days program activities. News releases were distributed to the media such as KOLD, KVOA, KGUN, Fox 11, various radio stations, and the Arizona Daily Star, and to individuals on our air quality advisory list serve.

PERCENT OF WORK COMPLETED: 161%

WORK ACCOMPLISHED:

PURCHASED ADVERTISEMENTS:

Staff purchased a split TV and digital campaign to increase exposure to our new *Idle Less* and *Healthy Air Is In Our Hands* messages. Forty-seven 30-, 15-, and five-second Public Service Announcements were aired on KVOA TV. The digital ads were posted on banners on KVOA.com and the KVOA News/Weather apps. The primary target are ages 18-34, with a secondary target ages 25-54. In addition, two email blasts were distributed on June 5 and June 19 from KVOA.

A digital ad, in-banner video, and wallpaper ad were also purchased on KOLD/TucsonNewsNow for greater exposure to our *Healthy Air Is In Our Hands Drive Less Pledge*.

Healthy Air Is In Our Hands ads were also placed as Supertail ads on the back end of Sun Tran buses. Posters were also placed on the inside of busses, further expanding our reach at no charge.

NEWS RELEASES TO MEDIA:

Staff developed and distributed 19 news releases this quarter, including seven air quality advisories for ozone, one air quality advisory for particulates, and two air quality watches for particulates. The other news releases announced Cyclovia, the Tucson Earth Day Festival, Earth Day tips, hazy mountain views, vehicle idle reduction, air-saving tips for a holiday weekend, an invitation to attend a special air quality open house event, and information on local air quality and national health standards.

News Releases	
Date	Title
4-Apr-18	Pima County DEQ Joins Living Streets Alliance for Cyclovia Tucson April 8th
12-Apr-18	Air Quality Health Watch (particulates)
12-Apr-18	Air Pollution Advisory (particulates)
13-Apr-18	Pima County DEQ Joins the Tucson Earth Day Celebration
16-Apr-18	Earth Day Tips to Try Any Day in 2018
17-Apr-18	Wind-Blown Particulates Block Mountain Views
19-Apr-18	Pima County DEQ Encourages Community to Idle Less for Healthy Air
23-Apr-18	Air Quality Advisory (ozone)

24-Apr-18	Air Quality Advisory (ozone)
11-May-18	Air Pollution Watch (particulates)
21-May-18	Air Quality Advisory (ozone)
23-May-18	Dollar and Air-Saving Tips for Memorial Day Weekend
29-May-18	Air Quality Advisory (ozone)
4-Jun-18	Clean Air Program Open House at Mt. Lemmon Community Center Saturday, June 9
5-Jun-18	Why is the Sky So Hazy Today?
20-Jun-18	Air Quality Advisory (ozone)
21-Jun-18	Air Quality Advisory (ozone)
22-Jun-18	Air Quality Exceeds EPA Health Standard in Pima County, Again
22-Jun-18	Air Quality Advisory (ozone)

AIR INDEX NOW INFORMATION:

The media can obtain real-time Air Quality Index (AQI) information from PDEQ's website, www.pima.gov/deq. 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.

MEDIA INTERVIEWS:

During the fourth quarter, staff was interviewed on seven instances:

- April 12: KVOA TV-4 – air quality;
- April 16: KVOI radio show – air quality;
- April 18: KVOI radio – air quality and Earth Day;
- April 23: AZPM radio – air quality/particulates/ozone;
- May 23: KVOI radio – air quality/ozone;
- May 29: KGUN TV-9 regarding ozone advisory;
- June 13 – U of A Wildcat Daily Newspaper – ozone/air quality

NEWS STORIES:

At least 48 news stories, advertisements or announcements related to No-Drive Day messaging reached thousands of community members via a variety of news stations, websites, newspapers, and newsletters.

Media Exposure via TV, Radio, Print, Outdoor Advertising and Publicity		
Date	Station/Publication	Subject
April 2018	Natural Awakenings	Idle Hands & Idling Engines
April 2018	NaturalTucson.com	Idle Hands & Idling Engines
April 2018	Spring Community Quarterly KGVY	Early Return of Ground-Level Ozone Season Possible
2-Apr-18	azpm.org	Health Officials Ready for Earlier Ozone Season
6-Apr-18	Tucson NewsNet	Cyclovia Tucson this weekend
6-Apr-18	Pima County FYI Newsletter	Pima DEQ to help celebrate Cyclovia this weekend
8-Apr-18	AZ Daily Star	Cyclovia Tucson celebrates cyclists and local business
12-Apr-18	Tucson Weekly	Tucson Earth Day Festival, ad (paid by Earth Day Festival)
12-Apr-18	kvoa.com	Four reasons why today's going to be nasty
12-Apr-18	kvoa.com	Harmful ozone increasing earlier in the year
12-Apr-18	kvoa.com	Health Watch issued for wind-blown dust potential
12-Apr-18	tucsonnewsnow.com	County issues air quality watch because of high winds
13-Apr-18	kgun9.com	Air pollution advisory in effect for Pima County
16-Apr-18	AZ Daily Star	Pima County DEQ joins Earth Day celebration
17-Apr-18	kvoa.com	Wind-blown dust obscuring mountains today

19-Apr-18	pima.gov	Pima DEQ encourages public to idle less for healthy air
20-Apr-18	downtowntucson.org	Tucson Earth Day Festival at the Children's Museum Tucson
20-Apr-18	kgun9.com	Awareness program launched to reduce engine idling and prevent pollution
20-Apr-18	Pima County FYI Newsletter	Join Pima DEQ for Earth Day on April 21
20-Apr-18	pima.gov	Join Pima DEQ at Earth Day and check out these Earth friendly tips
20-Apr-18	Tucson NewsNet Daily Digest	Tucson Earth Day Festival Downtown Tomorrow
22-Apr-18	Arizona Daily Star	Tucson Earth Day celebration; Earth Day Tips to Try Any Day
22-Apr-18	kgun9.com	Pima County Dept. of Environmental Quality issues air quality advisory for ozone pollution
22-Apr-18	kgun9 TV	Pima County Dept. of Environmental Quality issues air quality advisory for ozone pollution
23-Apr-18	AZPM	Radio interview re: ozone
23-Apr-18	forecast.weather.gov	Air Quality Alert (ozone)
23-Apr-18	kvoa.com	Air quality approaching unhealthy levels
24-Apr-18	news.azpm.org	Ozone Expected to Reach Problematic Levels in Tucson Tuesday
27-Apr-18	Pima County FYI Newsletter	Turn it off! DEQ wants you to idle less and help reduce air pollution
30-Apr-18	azbusinessdaily.com	Pima County offers resources to promote air quality by ending engine idling
May-2018	KVOA-TV	47 5-, 15-, and 30-second versions of Idle Less and Healthy Air Is In Our Hands PSAs
23-May-18	pima.gov	Money and air saving tips for Memorial Day
25-May-18	Pima County FYI Newsletter	DEQ's Memorial Day tips save money, air
29-May-18	KGUN 9 -TV	Interview re: ozone advisory
4-Jun-18	pima.gov	Clean Air Program hosts open house on Mt. Lemmon
5-Jun-18	KGUN 9 -TV	Hazy day hints at monsoon ahead
6-Jun-18	kvoa.com	Why was the sky so hazy Tuesday?
6-Jun-18	AZ Daily Star, tucson.com	Moisture in the air brings haze to Tucson
6-Jun-18	AZ Daily Star	Moisture in air created hazy Tuesday, could be sign of early start to monsoon
7-Jun-18	Nextdoor.com	Pima County Air Quality Open House is happening on June 09
8-Jun-18	Pima County FYI Newsletter	Clean Air Program hosts open house on Mt. Lemmon Community Center
15-Jun-18	pima.gov	County offers safety tips in preparation for monsoon
20-Jun-18	kvoa.com	Pima County issues air quality advisory
21-Jun-18	ein.az.gov	High Pollution Advisory for Ozone in the Tucson area June 21 and 22
21-Jun-18	pima.gov	Environmental Quality issues Air Quality Advisory for June 21
22-Jun-18	gvnews.com	Pima County ozone levels exceeding EPA standards
26-Jun-18	pima.gov	Air quality exceeds EPA health standard
26-Jun-18	pima.gov	PDEQ issues air quality advisory for third day this week

REPORTS OR DATA PRODUCED:

Impressions from KVOA and KOLD

Television broadcast and digital internet ads on KVOA and KOLD yielded a total of 502,074 impressions.

Total impressions for the TV and digital *Idle Less* and *Healthy Air Is In Our Hands* ads was 342,603. The mobile display ads purchased on KVOA yielded the total impressions of 104,970, with 280 clicks from individuals seeking more information about these subjects. The two email blasts from KVOA reached a total of 17,823 people. Of those, 2,389 opened the file and 311 clicked on a link.

The *Healthy Air Is In Our Hands Drive Less Pledge* digital ad, in-banner video, and wallpaper ad purchased on KOLD/TucsonNewsNow yielded 109,466 ads viewed, with an ad engagement of 146. The in-banner video drew 50,005 ad views, 254 expands and 203 video views. More than 28% of the viewers watched the entire commercial. Total impressions for the multi-level purchase were 159,471.

GOAL 7: CONTENT PRODUCED FOR SOCIAL MEDIA -----

VNDD/Clean Air Program staff posts messages on Twitter and Facebook, and worked with Pima County Communications staff for additional posts on YouTube, Facebook, and Instagram.

PERCENT OF WORK COMPLETED: 157%

WORK ACCOMPLISHED:

Twitter: PDEQ's first tweet on Twitter.com was on July 21, 2015. This quarter, PDEQ posted 78 tweets which yielded 85,200 impressions regarding various environmental subjects. Posts focused on air topics including: air quality, planting trees, clean air at parks, air pollution levels, air quality advisories and health watches, health effects from air pollution, particulate pollution, ground-level ozone, vehicle idle reduction, Tucson Earth Day Festival, Bike Fest, hazy views from wind-blown dust, actions to keep pollution levels down, Walk n' Roll to School Day, Cyclovia, National Walking Day, monthly tire pressure checks, wildfire smoke, air quality forecasts, Bike to Work Day, The Loop non-motorized pathway, transit resources, preventing fires, breathing, signing up for air quality advisories, biking, National Bike Month, Air Quality Awareness Week, funding for emissions-related vehicle repairs, Dump the Pump Day, Drive-Less pledge, World Environment Day, Air Quality Open House, sharing rides, combining trips, and air quality monitoring.

Facebook – Pima County: Staff worked with the Communications Office to post two *Healthy Air Is In Your Hands Drive Less Pledge* messages on Pima County's Facebook account in March and April, and purchased "boosts," or ads promoting the messages to targeted Facebook users. The ads were targeted to individuals between the ages of 16 and 60, who live up to 25 miles out of Tucson.

Facebook – 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. Nine messages were posted during this quarter, including messages regarding Bike Fest, Cyclovia, Tucson Earth Day Festival, Bike to Work Week, National Bike Challenge, and ozone pollution levels.

Instagram – Pima County: PDEQ's new *Idle Less* video was posted on Pima County's Instagram account in May.

YouTube: A new 40-second *Idle Less* video was posted on YouTube in April, which yielded 141 views this quarter. Additional videos previously produced for PDEQ that are still posted on YouTube include *Love the Air* (582 views), and *Help keep particles out of the air this New Year's* (English, 25 views, and Spanish versions). Pima County Communications staff produced and posted these public service announcements for the VNDD program.

REPORTS OR DATA PRODUCED:

Quarterly impressions on Twitter have increased from 215 in the first quarter we began tweeting to 85,200 impressions this quarter. PDEQ has 662 Twitter followers and is following 450 organizations.

Total impressions for *Healthy Air Is In Our Hands* exposure on Pima County's Facebook page in April is 21,579, total reach is 13,971, and the number of times users liked, shared, commented on the post or clicked on the link was 243.

GOAL 8: 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: 100%

WORK ACCOMPLISHED:

ANNUAL EVALUATION OF THE VOLUNTARY NO-DRIVE DAYS CAMPAIGN:

Staff worked with FMR Associates, Inc. to conduct the Evaluation of the 2017-2018 Pima County Voluntary No-Drive Days/Clean Air Program Campaign. The survey was conducted in March and April. Among other goals, the survey was completed to evaluate awareness and effectiveness of the 2017-2018 campaign and to determine current commute travel behavior including the use of or potential use of alternative modes of transportation within the population of Pima County.

To capture a reasonable representation of the population, 500 telephone and Internet surveys were completed among randomly-selected men and women age 16 and older in Pima County. Half the surveys were conducted via telephone interviews and half with on-line questionnaires.

YOUTH & ADULT PRESENTATION SURVEYS:

Surveys are distributed at or after presentations, as appropriate, to evaluate the effectiveness of the program in informing and encouraging no-drive actions among attendees. Twenty-five evaluations were returned this quarter, mostly from high school students in the Upward Bound Program.

TRAVEL REDUCTION PROGRAM SURVEYS DISTRIBUTED:

- **New Employee Orientation Evaluations:**

Staff received survey results regarding Travel Reduction program presentations during New Employee Orientations for Pima County. These surveys are distributed by the Human Resources Department. Overall, the topic is relevant to participants, presentations were clear, and the quality of the presentation materials either met or exceeded the expectations of the attendees.

- **Survey Monkey Evaluations:**

Staff distributed short on-line surveys to Pima County employees who attended Travel Reduction Program presentations at recent New Employee Orientations. The survey is designed to determine employee commute modes of choice and to evaluate the effectiveness of resources and information delivered during presentations. The survey is distributed every month to attendees of presentations held one month prior. The delay provides employees an opportunity to establish their commute modes of choice and acts as a timely reminder that alternate modes are available for those who have not chosen to use them.

Staff distributed Survey Monkey surveys to 128 employees this quarter, receiving 32 responses (25% response rate).

REPORTS OR DATA PRODUCED:

ANNUAL EVALUATION OF THE VOLUNTARY NO-DRIVE DAYS CAMPAIGN

Of the entire sample size, 69% were White, 25% Hispanic, 3% African-American, 2% Asian/Pacific Islander, and 1% Native American, which is on target with respect to ethnicity survey quotas for the population in Pima County. There was no gender distribution quota, and the randomness of the process acquired 51% women and 49% men respondents.

The majority of respondents (68%) have lived in Pima County for 11 or more years. When asked if the respondent or any other family member suffers from a breathing-related medical condition, 43% said yes.

Results of this annual survey indicate that awareness of the Clean Air Program has increased from 44% in 2017 to 46% this year. In addition, 84% overall are familiar with at least one Clean Air Program event or activity that is used to promote clean air in the Tucson area. Of this 84%, 18% say that they or someone in their household participated in at least one Clean Air activity.

Among this 18% who participated in a Clean Air event or activity, 64% say they have changed (or are considering to change) their daily routines or behaviors to help improve air quality. This is down from 74% last year. Those who say they are most apt to indicate a change in behavior after attending a Clean Air event include residents of the south region of the survey, women, 16-35 year-olds, and non-Whites.

When asked about the steps taken to reduce air pollution, the top four actions taken most often include generally driving less (37%), carpooling (35%), keeping vehicle tuned (34%) and keeping tires properly inflated (34%). Additional actions include planting trees (17%), avoiding excessive idling (16%), buying bicycles (15%), adjusting vehicle emissions control equipment (14%), choosing to not drive once a week (13%), and purchasing a more fuel-efficient vehicle (13%). A record low 11% say that they have done nothing to reduce air pollution (down from 12% last year), and these individuals are more likely to be unaware of the Clean Air Program and perceive only a minor air quality problem.

When asked opinions of the activities and events that encourage use of alternative modes of transportation, 87% of those aware of at least one Clean Air Program event indicate a favorable opinion of these events. Central residents, women and those who perceive a progressively more severe air quality problem are most likely to be “very favorable” (49%) of these activities and events.

Among households with children between ages five and 18, 53% indicate that these children have talked about or brought home materials from school about improving air quality.

To assess awareness of and exposure to Clean Air Program messaging, a series of questions were asked to find out what messages were seen or heard. Results indicate that 88% of respondents have seen or heard messaging regarding the importance of keeping tires properly inflated, 33% have seen or heard the phrase “Healthy Air Is In Our Hands,” 94% are aware that air pollution causes health problems, 88% are aware that vehicle engine idling causes air pollution, 86% understand what an air pollution advisory means, 80% have seen or heard information regarding clean air or air pollution, 82% are aware that the majority of our air pollution comes from motor vehicle use, 65% are aware of air pollution advisories in Pima County, and 58% agree that because they want to reduce air pollution, they are generally driving less.

Regarding the seriousness of an air quality problem in the Tucson area, 17% of respondents think that the Tucson area has a major air quality problem (down from 21% in 2017), 55% believe there is a moderate problem, and 24% believe that there is a minor air quality problem.

Up from last year (76%), 81% of respondents use single passenger commuting to work or school. The average frequency of use is 4.2 days (down from 4.3 days last year). Alternative travel methods used include 23% carpool or vanpool at least one day per week, 21% walk, 19% telecommute, 14% take the bus, 17% ride a bike, and 11% say they take the streetcar to work or school.

Reasons why respondents drive alone to and from work or school include convenience (40%), not having anyone with whom to carpool (22%), they like to drive alone (19%), work irregular hours (16%), need their car for business (13%) or personal errands (10%), there is no bus service in the area (8%), they need to work overtime (7%), or need the vehicle for dropping off children (5%).

FMR estimates that the number of daily commuter miles saved through alternate mode use is 4,141,734 vehicle miles per day, or 38% of the total miles driven and not driven. The actual number of vehicle miles saved daily has increased by 16% (3,569,409 in 2017) primarily due to a decrease in commute distance (12.4 in 2018 versus 14.5 in 2017). In addition, the frequency with which some alternate modes are used have increased.

Additional vehicle emissions are reduced by keeping tires properly inflated. From the data provided in this survey, FMR estimates that 34% (up from 31% last year) of the population are keeping tires properly inflated. This yields an annual reduction of 32,260,038 gallons of gasoline not purchased, along with the pollutants this gasoline would have released if burned.

YOUTH AND ADULT PRESENTATION SURVEYS

On a scale of one (1) to five (5) where one is “Low” and five is “High,” the audience rated the effectiveness of the presentation in increasing attendees’ knowledge of environmental issues a 4.24. On the same scale, they ranked the effectiveness of the presentation in encouraging actions to reduce air pollution at 4.28.

Attendees were asked what they liked best about the presentation. Comments include the presenter’s encouraging attitude, interactive and engaging activities, lung demonstration, explanation about issues, graphic visuals, stomp rocket activity, and that it was very informative. When asked how we could improve the presentation, comments include provide more fun, have more info on how to get involved, allow audience to look at the lungs more closely, make it more interactive, have more activities, provide more statistics, and show a more focused PowerPoint.

Additional comments include:

- “Good info. Love the lung demo! Thank you!”
- “I learned about the ozone.”
- “I learned other ways to help reduce pollution.”
- “It was pretty cool.”
- “It helped us learn about our past.”
- “It was well done, but the importance of reducing air pollution should sound more dire.”
- “It was very fun.”
- “Great activity. Maybe need a bit more info.”
- “Make it more entertaining.”

TRP SURVEY MONKEY SURVEYS OF NEW PIMA COUNTY EMPLOYEES

The data collected during the fourth quarter shows that alternate modes of transportation accounts for at least 19% of weekly commutes (including Sun Tran busses, SunLink Streetcar, carpool, vanpool, bike or walk). Collectively, these survey respondents avoid driving more than 449 miles per week due to their use of alternate modes of transportation, reducing air pollution and greenhouse gases by approximately 19,188 pounds per year. Adding up data from all four quarters this fiscal year, new employees will reduce vehicle miles traveled by at least 83,050 per year, reducing air pollution and greenhouse gases by 70,983 pounds per year.

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

- “[Provide] parking passes or vouchers for full time bike/walk commuters to use as necessary.”
- “Tying into apartment house website; Trulia, Zillow and other retail rental marketing sites.”
- “I would focus more on how choosing alternate modes is a benefit to the audience, rather than how NOT using alternate transport is bad.”
- “Tucson mass transit has sucked for years. Guess what – it still does!”
- “Great info, but there are not many alternate transportation routes to Pima Animal Care.”
- “How can we reduce miles while also taking two kids to two different schools every morning?”

- “I found the presentation helpful. My issue has been locating a carpool that works with location and schedule. More emphasis on growing the database in this regard would be beneficial.”
- “The presentation was good and provided a lot of information. Unfortunately, I need to have my car available to me at this point in time.”
- “I wish that we got more of a benefit for using alternative modes of transportation.”
- “This was a really interesting resource and I’m looking into alternate modes of transport once I know my routine with the new job. It would be nice to have this info again, like six months after starting.”
- “At this time, I am unable to use an alternate form of transportation to work and in my daily life. But, I did enjoy the alternate transportation presentation as it helped in assisting me for future options. Lots of great information presented and appreciated.”
- “Coming on as a new employee to the county, I had to wait three months before I could get a payroll deduction go in effect [for the transit subsidy]. In the meantime, I am paying the full price. There’s got to be a way to do [this better].”

GOAL 9: 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: 0%

No ADEQ conference calls or meetings were scheduled.

WORK ACCOMPLISHED: 0%

VNDD staff attended five meetings with ADEQ staff regarding the School Flag Program, Air Quality Forecasting, and Travel Reduction Program. No meetings were scheduled to calculate emission reductions from VNDD activities.

OZONE PREVENTION PLAN GOALS & ACCOMPLISHMENTS FY 2017-2018 -----

Per ADEQ12-008137 Amendment No. 13 for 2018, and as part of VNDD goals to keep Area B in attainment of the EPA ozone standard, staff developed and began implementing plans to increase awareness of the causes, health impacts and solutions to ground-level ozone and encourage actions by businesses, organizations and residents throughout Pima County to drive less and help reduce the formation of ozone.

Tasks accomplished *this quarter* for the ozone prevention goal are described in the text above in goals one to eight of this report. The itemized list below is provided separately to more easily demonstrate accountability for activity completed during the entire 2017-2018 fiscal year.

DEVELOP A PILOT OZONE PREVENTION PROGRAM

- VNDD staff developed and implemented a plan of action to reach additional audiences. Staff worked with the Pima County Communications Office and:
 - Worked to design new graphic messages for use on social media, PDEQ’s website, and news releases to attract attention and educate readers on a variety of actions that can be taken to reduce ozone;
 - Designed and purchased exterior bus ads and interior Sun Tran bus posters to reach riders and drivers;
 - Created educational panels for a table top display to educate families, businesses and community members about ozone;
 - Created and posted an *Idle Less* video and developed a storyboard for another video to educate viewers about ground-level ozone and actions to reduce pollution.

PROMOTE NO-DRIVE DAYS DURING PERIODS OF HIGH AIR POLLUTION

- Eleven Air Quality Advisories were issued this fiscal year for elevated levels of ground-level ozone and/or particulate pollution. These news releases included information about the pollutants and associated health effects, highlighted actions the public can take to protect their health, and encouraged the public to drive less and use alternate modes of travel.
- Additional news releases were distributed announcing the new ADEQ 5-Day Air Quality Forecasts, air pollution season change, checking air pollution levels in anticipation of exposure during outdoor celebrations, air quality tips for holiday weekends and the start of the school year, tips for reducing fire smoke, and the possibility of an early ground-level ozone season. These releases gave an opportunity for the public to be pro-active and responsive to timely anticipated elevated air pollution levels throughout the year.
- Dozens of social media messages were posted encouraging driving less and idling less, especially when AQI levels were in the moderate range.

TARGET EMPLOYEES OF LOCAL SMALL BUSINESSES ABOUT WAYS TO REDUCE DRIVING

- Provided an air quality presentation to members of the Southern Arizona Environmental Management Society who represent many small businesses throughout the Tucson region.
- Worked with the Downtown Partnership to help promote our *Activate Your Commute* event to their membership and downtown stakeholders. The Pima Association of Governments was also key in promoting the event to major employers in the downtown area. The event was held on January 30, 2018 and employees from Pima County, El Rio Health, U.S. Department of Justice and other federal employees, City of Tucson, State of Arizona and smaller businesses in the downtown area attended the event.

TARGET RELIGIOUS INSTITUTIONS ABOUT WAYS TO REDUCE DRIVING

- Staff developed messaging and a contact list to reach religious leaders in our community, with the primary goal to inspire Interfaith Community Service (ICS) members to take daily actions to protect air quality and community wellness as it relates to stewardship of creation religious beliefs. Over the past year, staff initiated contact with multiple churches referred through existing community contacts and ICS, a 33-year old non-profit organization with over one hundred faith community partners. The following faith-based organizations responded and expressed interest in VNDD programs:
 - Tikken Steering Committee and Creative Communications Learning Advisory Council (Collaborative Jewish inter-generational philanthropic organizations)
 - Young Men's Christian Association (YMCA)
 - St. Francis Methodist Church in the Foothills
 - Trinity Presbyterian Church
 - Tucson Ministry Alliance
 - Christ the King Episcopal Church
 - Our Savior's Lutheran Church
 - Fountain of Life Lutheran Church

Staff produced a map by zip codes of over 150 well-established and active Tucson churches, which will serve as a guide for future faith-community outreach efforts.

CREATE VISUALS AND/OR VIDEOS TO SUPPORT EDUCATIONAL CAMPAIGN ON SOCIAL MEDIA

- Created and produced vehicle idle reduction webpages on the PDEQ website.
- An Idle reduction bookmark was designed, printed, and reprinted for distribution to the general public and for distribution to Pima County employees. The bookmark is also available on the idle reduction webpages.

- Idle reduction video was created and posted online with assistance from a University of Arizona student intern and Pima County's Visual Media Production crew.
- Worked with Communications Office to develop multiple icons with No-Drive Days messaging that will accompany Twitter tweets and other promotional opportunities.

TARGET SCHOOLS TO REACH STAFF, STUDENTS AND FAMILIES ABOUT OZONE PREVENTION

- The idle reduction video is set on school grounds to target parent vehicle idling at the end of the school day.
- Created and printed a Pocket Parks idea and resource sheet that encourages parents to avoid vehicle idling at the end of the school day and engage with the school community in some capacity.
- Provided a faculty presentation at Twin Peaks Elementary School and a presentation to school nurses at the Amphitheater School District.
- Delivered youth presentations at the following schools and community programs: Twin Peaks Elementary, Sunrise Drive Elementary, Roadrunner Elementary, Robles Elementary, Trio Upward Bound Program at Pima Community College, NW YMCA Summer Camp and the University of Arizona ENVS 195A undergraduate class.
- Staffed event tables at the following events for school-age youth: Ventana Vista School, Ted Walker Youth Day, Metropolitan Energy Commission's Annual Key to Employment Symposium, St. Ambrose School, the League of United Latin American Citizens Youth Leadership Conference, Sahuarita Middle School, Catalina Community Center, Butterfield Elementary STEAM Night, AZ STEM Adventure, SARSEF, and Healthy Kids Day.
- Additional youth presentations were delivered at Wheeler Taft Abbett, Santa Rosa, and Valencia Public Libraries.

TARGET HOMEOWNER'S AND NEIGHBORHOOD ASSOCIATIONS

- Staff attends monthly meetings with the Green Valley Coordinating Council to keep members updated on air quality issues.
- Staff delivered a presentation for the Citizens for Picture Rocks, Lifelong Learning at the Highlands
- Targeting a new venue and audience, staff approached Pima County Natural Resources, Parks and Recreation to provide a Healthy Air Resources Open House event for the Mt. Lemmon community.
- PDEQ staff worked with Pima County Board of Supervisor Ramón Valadez District 2 staff to send information regarding air quality issues to neighborhood associations within the district.
- PDEQ staff also provided printed materials for distribution at a large neighborhood association meeting in Pima County Board of Supervisor Sharon Bronson's District 3.
- PDEQ distributed educational and informational materials to the Armory Park Neighborhood, Downtown Tucson Partnership, Suffolk Hills Property Owners Association, and Tucson Estates.

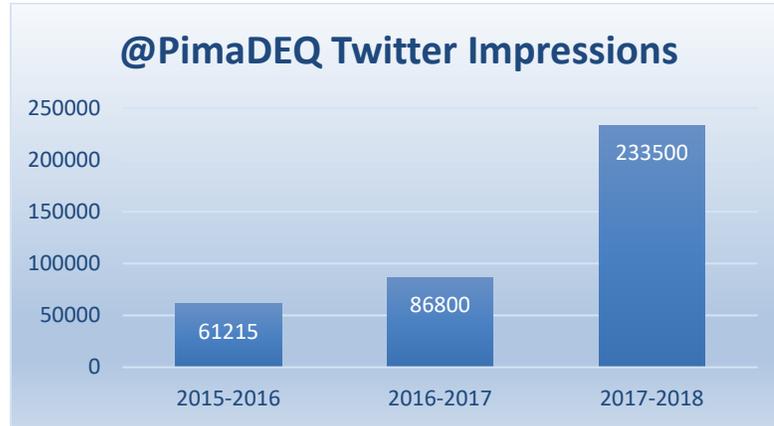
PARTNER WITH LOCAL ORGANIZATIONS TO EXPAND REACH

- Met with representatives from a variety of organizations to discuss partnering, planning collaborative projects, and providing VNDD resources to increase reach. Organizations include:
 - American Lung Association of Arizona
 - Downtown Tucson Partnership
 - El Rio Health
 - Living Streets Alliance
 - Pima County Public Library
 - Pima County Public Works Public Information Officers
 - Pima County Health Department
 - Pima County Human Resources Wellness Program
 - Pima County Communications Office

- Pima Association of Governments, Travel Reduction Program
- Tucson Earth Day Festival committee
- University of Arizona, Nutrition Network Program

TRACK IMPRESSIONS AND OUTREACH EFFORTS

- Below is a chart showing the growth of impressions from PDEQ’s Twitter activity since we began the account in July 2015.



- Pima County Facebook – *Healthy Air Is In Our Hands* messages in March and April 2018:
 - Total impressions: 58,879
 - Total reach: 36,497
 - Engagement: 938
- Website pageviews Fiscal Year 2017-2018:
 - PDEQ website: 92,857
 - Travel Reduction Program intranet site: 1,266
- Media impressions:
 - KVOA TV and digital ads, *Healthy Air Is In Our Hands* and *Idle Less* ad placement: 342,603
 - KOLD TucsonNewsNow.org, *Healthy Air Is In Our Hands* targeted ad placement: 159,471
- Outreach efforts:
 - People reached via booths at community events: 85,318
 - People reached via materials distribution: 3,460
 - People reached via presentations: 2,214

EVALUATE EFFECTIVENESS OF INITIAL PROGRAM

Pima County is at the cusp of exceeding the National Ambient Air Quality Standards for ground-level ozone. The special funding provided for ozone prevention allowed PDEQ staff to plan, develop new materials, purchase additional advertising to expand our reach and implement focused outreach on this important issue, as described above. PDEQ staff completed all major tasks proposed for the ozone prevention program. In addition, PDEQ VNDD program was able to purchase paid advertising to increase the reach of our message to improve air quality and reduce ozone by driving and idling less.

Results of the Annual Evaluation of the Voluntary No-Drive Day Program indicate that awareness of the Clean Air Program has increased from 44% in 2017 to 46% this year. An increase in awareness was likely due to the ability to purchase advertising on traditional and online media.

FUTURE PLANS TO CONTINUE OR EXPAND THE OZONE PREVENTION PROGRAM

Idle Less Campaign

Continue developing and implementing comprehensive idle reduction program, as resources are available.

- Continue to use the tools developed this fiscal year.
 - Idle less video, webpages, bookmark, Pocket Parks flyer.
 - Ozone poster for informational table-top display.
- Work with Pima County Fleet Services for targeted vehicle idle reduction outreach to Pima County employees.
- Target parent idle reduction at schools to reduce idling time as parents wait to drop off and pick up their students.

Focus efforts on schools

In addition to targeting a reduction in parent vehicle idling at schools, staff will continue to:

- Encourage active modes of transportation such as walking and biking to school.
- Provide classroom presentations about ground-level ozone.
 - Staff scheduled a series of air quality presentations for 13 weeks during the first semester at Quail Run Elementary of the 2018-2019 school year.
 - Additional presentations at other schools will be scheduled throughout the year.

Use Social Media

Continue to target PDEQ's increasing audience on social media to share ozone messages.

- Finalize and create an ozone education public service announcement video.
 - The concept and storyboard are already drafted. Staff will continue to work on this project with Pima County Communications Office to produce the video for posting on YouTube, PDEQ's website, and for use at outreach events.
- The number of followers on Twitter has grown rapidly this fiscal year (456 followers in 2017-2018 to 662 YTD in 2018-2019).
- Maintain collaboration with Pima County Communications Office to utilize Pima County social media outlets including Twitter, Facebook, and Instagram.