CAPCOG Air Quality Outreach and Education Report 2014

December 30, 2014

The Capital Area Council of Governments (CAPCOG) is submitting this *Air Quality Outreach and Education Report* to the City of Austin's (COA's) Air Quality program under Task 3 of the scope of work agreed to under an interlocal agreement between CAPCOG and COA that was executed on February 13, 2014. This report documents all work performed to date under this agreement, and includes the data, analysis, reports, and all other material obtained or generated using COA funds. This report also includes additional information on outreach and education activities reported by other entities that were coordinated under the *Austin-Round Rock Metropolitan Statistical Area Ozone Advance Program Outreach and Education Plan* developed under this interlocal agreement and submitted to COA in March 2014.

Summary of Activities Completed with City of Austin Funds

CAPCOG has used the funding provided by COA to complete the following activities:

- Task 1: Develop an Outreach and Education Work Plan for Central Texas: \$4,777.75;
- Task 2a: Radio Advertising May 26, 2014 June 29, 2014: \$16,002.50; and
- Task 2b: Radio Advertising August 25 September 28, 2014: \$59,219.75.

Detailed Cost Break-Down

The following table provides a detailed breakdown of the expenses for each activity by the object of expense.

Table 1: Expenses by Activity and Object

| Object of Expense | Task 1 | Task 2a | Ads 8/25 – 9/28 | TOTAL |
|---------------------|------------|-------------|-----------------|-------------|
| Salary | \$3,520.27 | \$0.00 | \$0.00 | \$3,520.27 |
| Fringe | \$860.58 | \$0.00 | \$0.00 | \$860.58 |
| Advertising | \$0.00 | \$14,730.00 | \$54,425.00 | \$69,155.00 |
| Accounting Services | \$19.94 | \$26.37 | \$183.25 | \$229.56 |
| Personnel Services | \$4.91 | \$0.00 | \$0.00 | \$4.91 |
| Indirect Costs | \$372.05 | \$1,246.13 | \$4,611.50 | \$372.05 |
| TOTAL | \$4,777.75 | \$16,002.50 | \$59,219.75 | \$80,000.00 |

Development of Outreach and Education Plan

The first task in the scope of work was to develop a Regional Air Quality Outreach and Education Work Plan. From January through March 2014, CAPCOG staff led meetings of a subcommittee of the Clean Air Coalition Advisory Committee (CACAC) in order to seek input from key participants in the Ozone Advance Program Action Plan. CAPCOG completed this plan at the end of March and submitted it to the COA as a deliverable.

As required by the scope of work in the interlocal agreement, the work plan accomplished the following:

- 1. Defined specific objectives for outreach and education efforts within the region (Section 2);
- 2. Defined air quality outreach and education strategies that should be implemented within the region to advance the goals of the Ozone Advance Program (OAP) Action Plan (Section 3);
- Evaluated existing air quality outreach and education efforts; identified opportunities to leverage existing resources currently being used for such activities, and opportunities to reduce duplication of efforts (Section 4);
- 4. Identified specific methods for measuring the impact of any strategies that will be implemented (Section 6);
- 5. Specified which entities will be responsible for implementing components of the plan (Section 7); and
- 6. Included a timeline for completion of all activities identified in the work plan (Section 5).

This *Outreach and Education Plan* is now the blueprint the region is using to guide air quality-related outreach activities. As a result of the planning process that went into the development of this plan, coordination among entities that are involved in outreach and education related to air quality has improved dramatically. This plan has enabled and guided the following activities in 2014:

- coordinated radio advertising;
- coordinated production of print materials donated by Travis County;
- coordinated event staffing;
- targeted presentations; and
- targeted one-on-one meetings.

Review of Goals

The plan identifies four general goals:

- 1. Persuade the general public to reduce emissions;
- 2. Persuade organizations to reduce emissions;
- 3. Protect sensitive populations from exposure to ozone pollution; and
- 4. Sustaining and expanding region-wide engagement in air quality activities.

Priorities for 2014

All of the various activities identified in the plan and implemented by regional partners are supposed to relate back to one or more of the four general goals listed above. The plan sets some specific priorities for 2014 as well. The plan identifies a number of priorities for 2014, which were explicitly endorsed by the Central Texas Clean Air Coalition at its March 26, 2014. A review of these priorities and how the various activities undertaken in 2014 related to these priorities is discussed below.

Improve Coordination

One of the key priorities for 2014 was to improve coordination among the various entities that actively participate in regional air quality-related outreach efforts. Each specific objective described under this overall heading are shown in bullets below, each of which are followed by a discussion of how activities in 2014 did or did not advance those priorities.

• Establish a standing Outreach and Education subcommittee of the CAC Advisory Committee in order to improve coordination among partners involved in outreach and education activities.

A permanent Outreach and Education Subcommittee was formed out of the planning committee that was assembled to advise CAPCOG on the development of the *Outreach and Education Plan*. The Outreach and Education Subcommittee has met once in each of the nine months since March.

- 1. April 14, 2014;
- 2. May 19, 2014;
- 3. June 16, 2014;
- 4. July 21, 2014;
- 5. August 25, 2014;
- 6. September 26, 2014;
- 7. October 22, 2014;
- 8. November 20, 2014; and
- 9. December 18, 2014.

Regular participants included staff members from CAPCOG, COA, Travis County, the Capital Area Metropolitan Planning Organization (CAMPO), CLEAN AIR Force, and Lone Star Clean Fuels Alliance (LSCFA). For most of the year, the responsibility for hosting and chairing these meetings rotated among the various participants. Starting in December, CAPCOG's part-time Air Quality Program Specialist Fred Blood will permanently take over this responsibility.

Develop a master list of events and outreach and education activities for the year.

While there were some initial efforts to develop a master list of events and outreach and education activities for the year through Google Maps, some technical issues with the program seemed to limit its utility. The meetings themselves served as a useful tool to identify and staff events. A renewed effort

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will be undertaken for 2015 to provide a more useful way for participants to share and review upcoming events.

• Develop and implement a consistent, unifying regional branding strategy.

The subcommittee did function well as a means to maintain consistency in branding and messaging. Much of this work had already been accomplished through the actual plan itself, though. Radio advertising, promotional items, and other materials used the tagline "be air aware," which had been developed in the planning process for the *Outreach and Education Plan*. The participants regularly consulted with each other on important messaging and collaborated on developing written materials when they were produced by one of the participants. This provided consistency and should have helped to amplify the messages each organization promoted.

Develop a targeted list of organizations to reach out to for 2014.

Extensive and detailed lists of organizations were developed as part of the planning process for the *Outreach and Education Plan*, but aside from those lists, no additional effort was undertaken to develop lists.

Review existing electronic and audio/visual content.

There was no comprehensive review of electronic or audiovisual content in 2014.

Develop content for new printed and audio/visual materials.

The new radio advertising constituted new audio materials, but no new printed or visual materials were produced. In most cases, existing print materials or visual materials were repurposed for use in 2014.

Identify opportunities for new funding or in-kind contributions for air quality education and outreach.

The first round of radio advertising purchased by CAPCOG from Emmis Communications was able to receive a 1 for 1 match, resulting in an additional 120 ads that were run in May and June. COA was also able to receive 27 spots free from KUT/KUTX along with the 250 ads purchased for the ozone season. Time Warner Cable continues to donate air time and production services to air the Public Service

Announcements (PSAs) from the High School PSA contest sponsored by CLEAN AIR Force. Finally, Travis County agreed to donate printing services up to 500 pieces per month as part of this regional effort.

Identify each organization's specific commitments for 2014.

Specific commitments changed throughout the season. In many cases, existing commitments were already underway by the end of March (such as radio advertising), while others arose through the course of the year and were discussed through the Outreach and Education Subcommittee.

Printed Materials

During the development of the outreach and education plan, participants in that effort identified a need to have printed material available for events and other outreach activities. This was described as follows:

• Procure high-quality printed material that can be used by regional air quality partners as part of their in-person outreach efforts – both for the general public and for targeted audiences.

Travis County owns a print shop and has made it available to print up to 500 pieces per month. In lieu of developing new material from scratch, the CACAC outreach and education committee reviewed materials already available from EPA, TxDOT, and TCEQ. The group decided upon the "Air Quality Guide for Ozone" from the AirNow.gov site, which describes ozone impacts on health and how to interpret the Air Quality Index (AQI).¹ The following two pages show the front and back of these pieces. Approximately 2,000 of these pieces had been printed by the end of November.

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http://www.epa.gov/airnow/ozone/air-quality-guide-0308.pdf



Air Quality Guide for Ozone

| Air Quality Index | Protect Your Health |
|--|--|
| Good (0-50) | No health impacts are expected when air quality is in this range. |
| Moderate (51-100) | Unusually sensitive people should consider limiting prolonged outdoor exertion. |
| Unhealthy for Sensitive Groups (101-150) | The following groups should limit prolonged outdoor exertion: People with lung disease, such as asthma Children and older adults People who are active outdoors |
| Unhealthy (151-200) | The following groups should avoid prolonged outdoor exertion: People with lung disease, such as asthma Children and older adults People who are active outdoors Everyone else should limit prolonged outdoor exertion. |
| Very Unhealthy (201-300) | The following groups should avoid all outdoor exertion: People with lung disease, such as asthma Children and older adults People who are active outdoors Everyone else should limit outdoor exertion. |

What You Should Know About Ozone and Your Health

- Ozone in the air we breathe can harm our health—particularly on hot, sunny days when ozone
 can reach unhealthy levels.
- · Even relatively low levels of ozone can cause health effects.
- People with lung disease, children, older adults, and people who are active outdoors may be particularly sensitive to ozone.
- Ozone exposure may also increase the risk of premature death from heart or lung disease.
- This fact sheet tells you how you can find out when air quality is unhealthy and take simple steps to protect your health.

What is ozone?

Ozone is a colorless gas found in the air we breathe. Ozone can be good or bad depending on where it occurs:

- Ozone occurs naturally in the Earth's upper atmosphere (the stratosphere), where it shields the Earth from the sun's ultraviolet rays.
- At ground-level, ozone is an air pollutant that can harm human health.

Where does ground-level ozone come from?

Ground-level ozone is formed when two types of pollutants react in the presence of sunlight. These pollutants are known as volatile organic compounds (VOCs) and oxides of nitrogen. They are found in emissions from:

- Vehicles such as automobiles, trucks, buses, aircraft, and locomotives
- · Construction equipment
- · Lawn and garden equipment
- Sources that combust fuel, such as large industries and utilities
- · Small industries such as gas stations and print shops
- · Consumer products, including some paints and cleaners

Does my area have high ozone levels?

- Ozone is particularly likely to reach unhealthy levels on hot sunny days in urban environments. It is a major part of urban smog.
- Ozone can also be transported long distances by wind.
 For this reason, even rural areas can experience high ozone levels.
- The Airnow Web site at airnow.gov provides daily air quality reports for many areas. These reports use the Air Quality Index (or AQI) (shown on the first page) to tell you how clean or polluted the air is.

 Enviroflash, a free service, can alert you via email when your local air quality is a concern. Sign up at www.enviroflash.info.

How does ozone affect health?

Ozone can:

- · Make it more difficult to breathe deeply and vigorously.
- Cause shortness of breath and pain when taking a deep breath.
- Cause coughing and sore or scratchy throat.
- Inflame and damage the lung lining.
- Make the lungs more susceptible to infection.
- Aggravate lung diseases such as asthma, emphysema, and chronic bronchitis.
- Increase the frequency of asthma attacks.
- Continue to damage the lungs even when the symptoms have disappeared.

These effects may lead to increased school absences, visits to doctors and emergency rooms, and hospital admissions. Research also indicates that ozone exposure may increase the risk of premature death from heart or lung disease.

Who is sensitive to ozone?

Some people are more sensitive to ozone than others. Sensitive groups include children; people with lung disease, such as asthma, emphysema, or chronic bronchitis; and older adults. Even healthy adults who are active outdoors can experience ozone's harmful effects.

What is an Air Quality Action Day for Ozone?

Your State or local air quality agency may declare an Air Quality Action Day for Ozone when ozone levels are forecast to reach unhealthy levels. On ozone action days, you can take simple steps (see below) to reduce the pollution that results in ground-level ozone.

Keep the Air Cleaner

- Conserve energy—at home, at work, everywhere. Turn off lights you are not using.
- Car pool or use public transportation. When air quality is healthy, bike or walk instead of driving.
- Combine errands to reduce vehicle trips.
- Limit engine idling.
- When refueling: Stop when the pump shuts off. Putting more fuel in is bad for the environment and can damage your vehicle. Avoid spilling fuel. Always tighten your gas cap securely.



Office of Air Quality and Radiation (6301A) EPA456-F-08-001 www.airnow.gov March, 2008

- · Keep your car, boat, and other engines tuned up.
- Inflate your car's tires to the recommended pressure.
- Use environmentally safe paints and cleaning products whenever possible.
- Follow manufacturers' recommendations to use and properly seal cleaners, paints, and other chemicals so smogforming chemicals can't evaporate.

On Air Quality Action Days, you should also:

- Refuel cars and trucks after dusk, when emissions are less likely to produce ozone.
- Delay using gasoline-powered lawn and garden equipment until air quality is healthy again.
- Delay using household, workshop, and garden chemicals until air quality is healthy again.

For more information, visit www.airnow.gov

Earned Media

One of the priorities for 2014 was to:

 Initiate a coordinated earned media campaign, including a press toolkit and other resources, in order to increase press coverage of ozone issues.

While the regional efforts did garner some coverage in 2014, there was not as coordinated of an effort on the press front or as sustained coverage as had been hoped. Part of this may be due to the very low number of ozone action days in 2014 (only 1), but improvements in earned media will be one of the priorities continued on into 2015. A toolkit was researched, but had not yet been assembled by the end of 2014.

Table 2: Regional Air Quality Press Coverage, 2014

| Date | News Org. | Medium | Activity |
|---------|--|--------|--|
| 3/19/14 | KXAN | TV | "Even as population explodes, local air quality improves" http://kxan.com/2014/03/19/even-as-population-explodes-local-air-quality-improves/ |
| 3/26/14 | Community Impact – Southwest Austin | Print | "Coalition wins EPA award for area smog reduction" http://impactnews.com/austin-metro/southwest-austin/coalition-wins-epa-award-for-area-smog-reduction/ |
| 4/8/14 | CLEAN AIR Force | Print | Ozone Season Kick-Off Press Release |
| 4/28/14 | KXAN | TV | "Summer-like heat kicks off ozone pollution season early" http://kxan.com/2014/04/28/hot-sunshine-is-kicking-off-ozone-pollution-season-early/ |
| 4/29/14 | KXAN | Blog | "A Closer Look at Ozone Action Days" http://blogs.kxan.com/2014/04/29/a-closer-look-at-ozone- action-days/ |
| 4/30/14 | Community Impact – Round Rock, Pflugerville, Hutto | Print | "Coalition wins EPA award for local region ozone-reduction programs" http://impactnews.com/austin-metro/round-rock-pflugerville-hutto/coalition-wins-epa-award-for-local-region-ozone-reduction-pr/ |
| 5/7/14 | Community Impact – Georgetown | Print | "Local coalition wins EPA award for regional ozone reduction programs" http://impactnews.com/austin-metro/georgetown/local-coalition-wins-epa-award-for-regional-ozone-reduction-/ |
| 5/14/14 | Community Impact – Leander and Cedar Park | Print | "Coalition wins EPA ward for local region ozone-reduction programs" http://impactnews.com/austin-metro/leander-cedar-park/coalition-wins-epa-award-for-local-region-ozone-reduction-pr 1/ |

| Date | News Org. | Medium | Activity |
|-----------|----------------------------------|---------|--|
| 6/27/14 | Austin Chronicle | Print | "Getting off the Road – Rail will help, roads will help – but so will your decision not to drive today" http://www.austinchronicle.com/news/2014-06-27/getting-off-the-road/ |
| 8/13/14 | KXAN | TV | "Go [extra] Green! It's Ozone Action Day" http://kxan.com/2014/08/13/ozone-action-day-declared-for- thursday/ |
| 8/13/14 | KXAN | Twitter | "An Ozone Action Day has been declared for Thursday!! More to come on @KXAN_News at 6, 9, and 10 with Jim Spencer" https://twitter.com/KXAN_Weather/status/49962655470898 3811 |
| 9/24/14 | Community Impact | Print | "Austin seeks increase of solar energy usage" http://impactnews.com/austin-metro/central-austin/austin-seeks-increase-of-solar-energy-usage/ |
| 10/6/2014 | CLEAN AIR Force | Print | High School Public Service Announcement (PSA) Air Quality Contest Announcement Press Release |
| 10/15/14 | Community Impact | Print | "Partnership aims to promote cars of tomorrow today" http://impactnews.com/austin-metro/san-marcos-buda-kyle/partnership-aims-to-promote-cars-of-tomorrow-today/ |
| 11/26/14 | Austin- American Statesman | Print | "How Austin could be affected by EPA's proposed air emissions standards" http://www.mystatesman.com/news/news/how-austin-could-be-affected-by-epas-proposed-air-/njGgz/ |

Electronic Media

One of the objectives of the plan was to:

Maximize the utility of existing electronic resources used for ozone outreach.

Not as much activity was undertaken to revamp electronic resources, although, new CAPCOG webpages were specifically set up to work in conjunction with the radio advertising purchases.

The following table shows the webpage hits on CAPCOG's air quality-related pages during the official ozone season. These data were obtained from Google Analytics. "Page views" refers to any view of a given page, including multiple views for a given page, while "unique page views" refers the number of visits to a page, not counting multiple views. The "bounce rate" refers to the percentage of initial page views that resulted in a user leaving the site without viewing any more CAPCOG pages, while the "exit rate" refers to the percentage of page views for which a page was the last one viewed before a user left the CAPCOG site.

Table 3: CAPCOG Air Quality Web Page Statistics, March 1, 2014 – October 31, 2014

| Page | Page Views | Unique Page Views | Avg. Time on Page (seconds) | Bounce Rate | % Exit |
|---|---------------|----------------------|-----------------------------------|----------------|---------|
| /air-quality/ | 1,393 | 962 | 98.08 | 48.46% | 30.80% |
| /clean-air-coalition | 494 | 346 | 137.43 | 54.50% | 37.85% |
| /ozone-advance/ | 343 | 233 | 199.63 | 53.17% | 49.56% |
| /aq-reports | 259 | 104 | 141.63 | 50.00% | 28.19% |
| /air-quality | 240 | 162 | 83.04 | 42.19% | 25.83% |
| /drive-clean-help-buying-a- cleaner-vehicle | 231 | 200 | 495.80 | 53.85% | 75.76% |
| /ozone-watch-warning | 133 | 126 | 420.63 | 92.06% | 93.98% |
| /ozone-101 | 130 | 120 | 126.31 | 81.18% | 65.38% |
| /cacac | 128 | 95 | 88.58 | 41.03% | 25.78% |
| /aq-status | 111 | 95 | 179.56 | 77.78% | 43.24% |
| /aq-initiatives | 92 | 76 | 196.64 | 69.23% | 51.09% |
| /ozone-monitoring | 68 | 49 | 238.88 | 72.73% | 50.00% |
| /emissions | 51 | 36 | 135.67 | 40.00% | 23.53% |
| /ozone-standards | 51 | 46 | 57.70 | 89.74% | 80.39% |
| /monitoring | 46 | 37 | 172.15 | 60.00% | 26.09% |
| /emissions-inventory1 | 32 | 30 | 69.30 | 71.43% | 68.75% |
| /aq-alerts/ | 28 | 23 | 190.27 | 66.67% | 60.71% |
| /drive-clean-help-buying-a- cleaner-vehicle/ | 13 | 11 | 139.50 | 100.00% | 84.62% |
| /clean-air-coalition/ | 12 | 7 | 338.70 | 50.00% | 16.67% |
| /aq-initiatives/ | 6 | 6 | 1239.00 | 100.00% | 83.33% |
| /cacac/ | 4 | 3 | 588.00 | 0.00% | 0.00% |
| /ozone-advance | 4 | 3 | 24.00 | 66.67% | 75.00% |
| /air-quality-news/ | 3 | 3 | 15.50 | 100.00% | 33.33% |
| /emissions-inventory1/ | 3 | 3 | 18.00 | 0.00% | 33.33% |
| / aq-initiatives | 2 | 1 | 16.00 | 0.00% | 50.00% |
| /aq-reports/ | 2 | 2 | 674.00 | 0.00% | 50.00% |
| /naaqs | 2 | 2 | 0.00 | 100.00% | 100.00% |
| /regional-solid-waste- management-planning/ | 2 | 2 | 11.00 | 0.00% | 50.00% |
| /air-alerts/ | 1 | 1 | 33.00 | 0.00% | 0.00% |
| /emissions/ | 1 | 1 | 13.00 | 0.00% | 0.00% |
| /monitoring/ | 1 | 1 | 13.00 | 0.00% | 0.00% |
| /Ozone_AdvanceCalendar/ | 1 | 1 | 0.00 | 0.00% | 100.00% |

| Page | Page Views | Unique Page Views | Avg. Time on Page (seconds) | Bounce Rate | % Exit |
|-----------------------|---------------|----------------------|-----------------------------------|----------------|--------|
| /ozone-101/ | 1 | 1 | 27.00 | 0.00% | 0.00% |
| /ozone-standards/ | 1 | 1 | 21.00 | 0.00% | 0.00% |
| /ozone-watch-warning/ | 1 | 1 | 26.00 | 0.00% | 0.00% |
| TOTAL | 3,890 | 2,790 | 160.62 | 54.75% | 41.16% |

Events

Priorities for staffing events identified in the Outreach and Education Plan included the following:

• Identify and strategically schedule opportunities to reach the general public through community events and other opportunities to present to various groups.

The following table represents a compilation of the events staffed by organizations participating in the Outreach and Education Plan in 2014. The table includes data on the number of hours and labor-hours went into these events, as well as the number of people contacted at these events. One of the successes for this year was much more comprehensive coverage of important community events in Bastrop, Caldwell, and Williamson Counties. There was also a lot of success in collecting data that will be useful in planning for event staffing in the future.

Note that this list does not necessarily include all events that could have an air quality benefit, such as Austin Energy outreach to promote energy efficiency or CapMetro outreach to promote the use of mass transit, but rather the events that were specifically reported to CAPCOG from participants in the Outreach and Education Subcommittee.

Table 4: Outreach and Education Events Staffed in 2014 with Quantitative Data

| Date | Event | County | Time | Hours | People Reached | Personnel | Labor Hours | Persons Reached Per Hour | Persons Reached Per Labor Hour |
|-----------|--|------------|-----------------------|-------|-------------------|--|----------------|--------------------------------|---|
| 3/29/14 | Zilker Botanical Garden | Travis | 9:30 am – 5:30 pm | 8 | 110 | Cari Buetow, Pharr Andrews, Mary Priddy, Lydia Jarjoura | 8 | 13.8 | 13.8 |
| 3/30/14 | Zilker Botanical Garden | Travis | 9:30 am – 5:30 pm | 8 | 110 | Cari Buetow, Pharr Andrews, Mary Priddy, Lydia Jarjoura | 8 | 13.8 | 13.8 |
| 4/22/14 | Samsung Earth Day | Travis | 10:30 am – 1:30 pm | 3 | 60 | Cari Buetow, Julie Mazur | 3 | 20.0 | 20.0 |
| 4/22/14 | Thinkery Earth Day | Travis | 10:00 am – 1:00 pm | 3 | 50 | Pharr Andrews | 3 | 16.7 | 16.7 |
| 4/26/14 | ALA Fight for Air Climb | Travis | 7:00 am – 12:00 pm | 5 | 75 | Cari Buetow | 5 | 15.0 | 15.0 |
| 5/12/14 | Dell CIO People Rally | Williamson | 10:00 am – 1:00 pm | 3 | 107 | Cari Buetow | 3 | 35.7 | 35.7 |
| 6/5/14 | Dell World Environment Day | Williamson | 10:30 am – 1:30 pm | 3 | 81 | Cari Buetow, Julie Mazur | 6 | 27.0 | 13.5 |
| 6/12/2014 | Governor's Small Business Forum and Showcase | Travis | 1:00 pm – 7:00 pm | 6 | 16 | Tom Gleason | 6 | 2.7 | 2.7 |

| Date | Event | County | Time | Hours | People Reached | Personnel | Labor Hours | Persons Reached Per Hour | Persons Reached Per Labor Hour |
|---------|--|------------|-----------------------|-------|-------------------|--|----------------|--------------------------------|---|
| 6/19/14 | City of Austin Employee Safety Association Conference | Travis | 7: 00 am – 3:00 pm | 8 | 284 | Shana Norton, Cari Buetow, Pharr Andrews, Lily Zintak | 16 | 35.5 | 17.8 |
| 6/26/14 | Luling Watermelon Thump | Caldwell | 5:00 pm – 9:00 pm | 4 | 60 | Julie Meyer | 4 | 15.0 | 15.0 |
| 6/28/14 | Luling Watermelon Thump | Caldwell | 10:00 am – 4:00 pm | 6 | 107 | Cari Buteow, Andrew Hoekzema | 6 | 17.8 | 17.8 |
| 6/29/14 | Luling Watermelon Thump | Caldwell | 1:30 pm – 4:00 pm | 2.5 | 30 | Andrew Hoekzema | 2.5 | 12.0 | 12.0 |
| 7/4/14 | Round Rock Frontier Days Celebration | Williamson | 11:00 am – 3:15 pm | 3.25 | 30 | Andrew Hoekzema | 3.25 | 9.2 | 9.2 |
| 7/15/14 | Sustainable Food Center Farmer's Market – East | Travis | 2:30 pm – 7:00 pm | 4.5 | 46 | Cari Buetow, Lily Zintak | 5.5 | 10.2 | 8.4 |
| 7/23/14 | Sustainable Food Center Farmer's Market – Triangle | Travis | 2:30 pm – 7:00 pm | 4.5 | 45 | Lily Zintak, Cari Buetow | 6.5 | 10.0 | 6.9 |
| 7/29/14 | Sustainable Food Center Farmer's Market – East | Travis | 2:30 pm – 7:00 pm | 4.5 | 34 | Lily Zintak, Pharr Andrews | 6.5 | 7.6 | 5.2 |

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| Date | Event | County | Time | Hours | People Reached | Personnel | Labor Hours | Persons Reached Per Hour | Persons Reached Per Labor Hour |
|----------|--|------------|-----------------------|-------|-------------------|--|----------------|--------------------------------|---|
| 8/7/14 | APD VIN Etching Event | Travis | 10:00 am – 1:00 pm | 3 | 31 | Lily Zintak | 3 | 10.3 | 10.3 |
| 9/20/14 | Electric Vehicle Picnic – LSCFA | Travis | 10:00 am – 2:00 pm | 4 | 54 | Linda Daubert Julie Mazur? | 8 | 13.5 | 6.8 |
| 9/25/14 | City of Austin Getting Connected: Small Business Event | Travis | 1:30 pm – 6:30 pm | 5 | 15 | Cari Buetow? | 5 | 3.0 | 3.0 |
| 10/4/14 | National Night Out Kickoff Party | Travis | 10:00 am – 2:00 pm | 4 | 274 | Julie Mazur, Cari Buetow | 8 | 68.5 | 34.3 |
| 10/13/14 | Pearson Earth Awareness Fair | Travis | 11:00 am – 2:00 pm | 3 | 110 | Julie Mazur, Cari Buetow | 6 | 36.7 | 18.3 |
| 10/17/14 | Austin Transportation Department Mobility Week | Travis | 11:30 am – 1:00 pm | 2.5 | 21 | Cari Buetow, Adrian Lipscomb | 5 | 8.4 | 4.2 |
| 10/18/14 | Hutto Old Tyme | Williamson | 8:00 am – 5:00 pm | 9 | 86 | Linda Daubert, Sarah Holland, Pharr Andrews | 9 | 9.6 | 9.6 |
| 10/20/14 | Austin Transportation Department Mobility Week | Travis | 11:30 am – 1:00 pm | 2.5 | 8 | Pharr Andrews, Marissa Monrow | 5 | 3.2 | 1.6 |

| Date | Event | County | Time | Hours | People Reached | Personnel | Labor Hours | Persons Reached Per Hour | Persons Reached Per Labor Hour |
|-----------------------|--|---------|-----------------------|-------|-------------------|---|----------------|--------------------------------|---|
| 10/21/14 | Austin Community College Mobility Week | Travis | 10:00 am – 1:00 pm | 3 | 22 | Pharr Andrews, Julie Mazur | 6 | 7.3 | 3.7 |
| 10/22/14 | LDR Spine Health and Wellness Fair | Travis | 11:00 am – 2:00 pm | 3 | 66 | Julie Mazur, Cari Buetow | 3 | 22.0 | 22.0 |
| 10/25/14 | Elgin Hogeye Festival | Bastrop | 8:00 am – 3:15 pm | 7.25 | 110 | Linda Daubert, Andrew Hoekzema | 7.25 | 15.2 | 15.2 |
| 10/31/14 | Commute Solutions All-Star Commuter Celebration | Travis | 11:00 am – 1:00 pm | 2 | 39 | Cari Buetow, Pharr Andrews | 4 | 19.5 | 9.8 |
| *November 14, 2014 | TxDOT and CTRMA Bergstrom Expressway Open House | Travis | 4:00 pm – 7:00 pm | 3 | 21 | Julie Mazur | 3 | 7.0 | 7.0 |
| TOTAL | n/a | n/a | n/a | 127.5 | 2,102.0 | n/a | 164.5 | 16.5 | 12.8 |

^{*}occurred after the end of ozone season.

Using data from the Texas Workforce Commission's TRACER Data Link² from the Quarterly Census of Employment and Wages, local government employees in NAICS Code 921 (Executive, legislative, and general government) received an average weekly wage of \$934, or \$23.35 per hour in the 2nd quarter. This translates into approximately \$3,841 in salary expenses for time spent to staff these events, or about \$1.83 per contact made.

The table below shows a comparison of the distribution of the Austin-Round Rock Metropolitan Statistical Area's (MSA's) population by County compared to the distribution of event contacts by county, based on the location of the event.

Table 5: Comparison of Population by County to Contacts at Events by County

| County | Population July 1, 2013 ³ | County % of MSA Population | Persons Contacted | County % of Total Contacts |
|------------|---|----------------------------|----------------------|-------------------------------|
| Bastrop | 75,825 | 4% | 110 | 5% |
| Caldwell | 39,232 | 2% | 197 | 9% |
| Hays | 176,026 | 9% | 0 | 0% |
| Travis | 1,120,954 | 60% | 1,491 | 71% |
| Williamson | 471,014 | 25% | 304 | 14% |
| Total | 1,883,051 | 100% | 2,102 | 100% |

As this table shows, one major gap in coverage was Hays County, and coverage in Williamson County was not as extensive as its population would warrant. CAPCOG will work with regional partners to get more events staffed in these jurisdictions in 2015.

The following activities were also reported for 2014, for which either data were not collected or the event did not fit into another category

Table 6: Other Activities, 2014

| Date | Organization | Event | Other Details |
|-----------|--------------------|---|---------------|
| 1/17/2014 | CLEAN AIR Force | Meeting with St. Ignatious Church and School | n/a |
| 4/8/2014 | CLEAN AIR Force | Ozone Season Kick-Off Event & Round Rock City Hall | n/a |
| 4/22/2014 | CLEAN AIR Force | Austin Community College's Greener Choices Earth Day Festival at Riverside Campus | n/a |
| 4/26/2014 | CLEAN AIR Force | Austin's Earth Day Festival at Mueller Development | n/a |

² http://www.tracer2.com/?PAGEID=67&SUBID=120

³ http://factfinder2.census.gov/bkmk/table/1.0/en/PEP/2013/PEPSR6H/0400000US48.05000?slice=Year~est72013

| Date | Organization | Event | Other Details |
|-----------|--------------------|---|---|
| 9/10/2014 | City of Austin | Austin Police Department National Night Out Bag Stuffing | 500 Air Quality Index Flyers and 1,000 Commute Solutions Bookmarks Stuffed into Bags; 2 hours of labor |
| 10/9/2014 | CLEAN AIR Force | Freescale's Health & Lifestyle Expo | n/a |

Presentations and One-on-One Meetings

Presentations and strategic one-on-one meetings continued to be a major focus of regional outreach efforts. The table below shows the presentations and meetings conducted in 2014.

Table 7: Presentations and One-on-One Meetings, 2014

| Date | Audience | Location | County | Attendance | Persons Giving Presentation |
|------------|--|----------------|-----------|------------|--|
| 1/27/2014 | Girl Scout Troop | Buda | Hays | 10 | Cari Buetow |
| 3/5/2014 | City of Austin Environmental Board | Austin | Travis | 15 | Cari Buetow and Pharr Andrews |
| 3/26/2014 | Texas Nursery and Landscaping Association (TNLA) | Webinar | Statewide | 22 | Cari Buetow and Stacy Neef |
| 4/1/2014 | Kyle City Council Meeting | Kyle | Hays | 28 | Bill Gill |
| 4/21/2014 | Toastmasters Meeting | Austin | Travis | 14 | Cari Buetow |
| 6/19/2014 | Austin Independent School District (AISD) Operations Staff Meeting | Austin | Travis | 5 | Andrew Hoekzema and Julie Meyer |
| 8/4/2014 | City of Austin Council Transportation Planning Committee | Austin | Travis | 12 | Andrew Hoekzema and Pharr Andrews |
| 8/12/2014 | Code Compliance Safety Meeting | Austin | Travis | 70 | Cari Buetow and Mary Pridy |
| 8/14/2014 | TNLA Expo | San Antonio | Statewide | 6 | Cari Buetow, TCEQ, NPS, Clean Cities |
| 8/26/2014 | Code Compliance Safety Meeting | Austin | Travis | 20 | Cari Buetow |
| 9/12/2014 | CoA Environmental Board AQ Committee Meeting | Austin | Travis | 4 | Andrew Hoekzema |
| 10/2/2014 | Meeting with Austin White Lime | Austin | Travis | 1 | Andrew Hoekzema and Sarah Holland |
| 10/14/2014 | CoA Environmental Board AQ Committee Meeting | Austin | Travis | 4 | Andrew Hoekzema |
| 11/24/2014 | Meeting with Austin White Lime | Austin | Travis | 2 | Andrew Hoekzema, Linda Daubert, and Fred Blood |

These presentations and meetings reached approximately 213 people, many of whom were in strategically important positions such that they could influence a significant amount of emissions-related activity.

Specific objectives are described below in bullets, with discussion following each bullet.

 Schedule at least one air quality presentation annually at each City Council and County Commissioner's Court for jurisdictions participating in the CAC.

This did not occur in 2014. Since many presentations were made in late 2013, this did not become a very significant priority for participants. Later in the ozone season, discussion turned to conducting a coordinated set of presentations early in 2015 in conjunction with the release of the EPA's Ozone Standard Proposal. Those presentations are currently being planned.

- Schedule meetings with leaders of strategically important to recruit for participation in the OAP Action Plan, particularly:
 - School districts;
 - Universities and colleges;
 - Health care institutions;
 - Business and trade organizations that aren't currently participating in the CLEAN AIR Force's Clean Air Partners Program; and
 - Government entities not currently participating in the regional air quality plan.

The presentation to the Kyle City Council on April 1, the meeting with the AISD Operations Staff on June 19, and the meetings with Austin White Lime on October 2 and November 24 were the activities that were most directly consistent with the objectives identified in the plan. The presentation to the City of Austin's Transportation Planning Committee and the Environmental Board's Air Quality Committee were also directly related to the objectives in the plan, and should be particularly important in ensuring continued focus on this issue at the City of Austin as it transitions into its new 10-1 Council system that will see 9 new elected officials taking office in January, with only 1 staying on from the current council.

In addition to the meeting with AISD, CAPCOG had initially scheduled a meeting with Leander ISD staff, but the meeting was cancelled and was not subsequently rescheduled.

While the meetings and presentations with the City of Kyle, AISD, and Austin White Lime represented the largest city, school district, and the largest point source operator not participating in the regional air quality plan, there were not as many meetings as had been hoped, and no meetings occurred with universities/colleges or health care institutions. Coordinating such presentations will take on a renewed focus for 2015.

Radio Advertising

One of the key focuses for 2014 was radio advertising. The plan specifically called for the following:

Purchase cost-effective radio advertising targeted at commuters.

Targeting of commuters was achieved by purchasing "drive time" advertising occurring Monday – Friday, 6 am - 10 am and 3 pm - 7 pm.

The table below summarizes all of the air quality related-advertising purchased (including spots donated as part of a purchase) in 2014.

| Organization | Station | Start Date | End Date | Spots | Cost | |
|----------------|-------------|------------|-----------------|-------|--------------|--|
| CAPCOG | KBPA-FM | 5/25/2014 | 6/29/2014 | 60 | | |
| CAPCOG | KLBJ-AM | 5/25/2014 | 6/29/2014 | 60 | ¢14.720.00 | |
| CAPCOG | KLZT-FM | 5/25/2014 | 6/29/2014 | 60 | \$14,730.00 | |
| CAPCOG | KROX-FM | 5/25/2014 | 6/29/2014 | 60 | | |
| CAPCOG | KKMJ-FM | 8/25/2014 | 9/26/2014 | 75 | \$2,250.00 | |
| CAPCOG | KLBJ-AM | 8/25/2014 | 9/26/2014 | 50 | \$7,500.00 | |
| CAPCOG | KPEZ-FM | 8/25/2014 | 9/26/2014 | 130 | \$8,125.00 | |
| CAPCOG | KBPA-FM | 8/25/2014 | 9/26/2014 | 75 | \$14,325.00 | |
| CAPCOG | KLZT-FM | 8/25/2014 | 9/26/2014 | 50 | \$6,750.00 | |
| CAPCOG | KASE-FM | 8/25/2014 | 9/26/2014 | 70 | \$14,875.00 | |
| City of Austin | KLBJ-AM | 5/26/2014 | 10/30/2014 | 115 | | |
| City of Austin | KGSR-FM | 5/26/2014 | 10/30/2014 | 100 | \$15,105.00 | |
| City of Austin | KLZT-FM | 5/26/2014 | 10/30/2014 | 100 | | |
| City of Austin | KUT-FM | 4/21/2014 | 10/19/2014 | 137 | \$25,000.00 | |
| City of Austin | KUTX-FM | 4/21/2014 | 10/19/2014 | 137 | \$23,000.00 | |
| САМРО | KUT-FM | 3/24/2014 | 10/26/2014 | 101 | \$16,143.69 | |
| САМРО | KUTX-FM | 3/24/2014 | 10/26/2014 | 73 | Ç10,143.09 | |
| Travis County | KLZT HD2-FM | 6/16/2013 | 7/13/2014 | 42 | \$1,600.00 | |
| Travis County | KLZT-FM | 6/16/2013 | 7/13/2014 | 42 | \$2,400.00 | |
| Travis County | KBPA-FM | 6/16/2013 | 7/13/2014 | 62 | \$4,950.00 | |
| TOTAL | ALL | 3/24/2014 | 10/30/2014 | 1,599 | \$133,753.69 | |

CAPCOG Radio Advertising

Using funding provided through CAPCOG's interlocal agreement with City of Austin, CAPCOG purchased radio advertising in two rounds: 1) May 26 – June 29, and 2) August 25 – September 26.

May/June Radio Ad Buy

The first round of radio advertising occurred on four radio stations owned by Emmis Communications encouraging residents of Central Texas to sign up for air quality alerts. The advertising was procured under a competitive process involving a request for quotes from radio companies in the region. Stations were asked to submit quotes and data that would indicate the extent of the audience that could be reached with this campaign. Some of the goals of the campaign were to:

- reach parents, who would be more likely to be sensitive to the need to stay informed about air pollution;
- 2. reach audiences for which language may be a barrier to receiving air quality messages; and
- 3. reach audiences in the suburban counties in the MSA roughly in proportion to those counties' share of the region's population.

Companies that submitted quotes were asked to submit data that would indicate to what extent advertisements on their stations would achieve these goals. CAPCOG also asked stations to indicate to what extent they could offer free matches for the drive-time ads purchased. The budget for this campaign was \$15,000. The package of radio advertising that was ultimately selected cost \$14,730.00, with an additional \$1,272.50 in CAPCOG internal charges for completing the purchase, bringing the total cost associated with this purchase up to \$16,002.50.

A total of 240 thirty-second radio spots were run during this period on four stations, including one Spanish-language station (KLTZ). Half of the ads ran during "drive time" (6 am – 10 am and 3 pm – 7 pm, Monday - Friday), and half of which occurred periodically throughout the week between 6 am – midnight as part of Emmis's "Insight Matching," whereby Emmis contributed free air time to run the ads as a match to drive-time advertising purchased by CAPCOG. The schedule for the advertising campaign is shown below.

| Tab | le 8: | Radio | Advertis | sing Spots, | May | 26-June | 29, | 2014 |
|-----|-------|-------|----------|-------------|-----|---------|-----|------|
| | | | | | | | | |

| Station | Monday-Friday 6 am – 10 am | Monday-Friday 3 pm – 7 pm | Monday-Sunday 6 am – 12 am | Total Spots |
|---------|-------------------------------|------------------------------|-------------------------------|----------------|
| KROX-FM | 12 | 18 | 30 | 60 |
| KBPA-FM | 12 | 18 | 30 | 60 |
| KLZT-FM | 12 | 18 | 30 | 60 |
| KLBJ-AM | 12 | 18 | 30 | 60 |
| TOTAL | 48 | 72 | 120 | 240 |

Since the actual purchase was for the drive-time ads, the cost per ad for that portion was \$134.32 per spot. With the match, however, the cost per ad was half of that - \$67.68 per spot.

The script for these ads was developed by CAPCOG in consultation with members of the Outreach and Education Subcommittee. The focus of this script was to promote the "Be Air Aware" message, encouraging listeners to sign up for air quality forecasts. It read as follows:

HEADING OUTSIDE? IT'S OZONE SEASON IN CENTRAL TEXAS, AND SMOG LEVELS CAN BE UNHEALTHY FOR KIDS, PETS, SENIORS, AND PEOPLE WITH ASTHMA. EVEN THOUGH YOU CAN'T SEE IT, SMOG CAN IRRITATE YOUR LUNGS AND MAKE IT HARD TO BREATHE. WHEN CHECKING THE WEATHER, BE SURE TO CHECK THE AIR QUALITY FORECAST, TOO. IF OZONE'S HIGH, BE CAREFUL OUTSIDE. SIGN UP FOR AIR QUALITY ALERTS AT CAPCOG DOT ORG SLASH AIR QUALITY. THAT'S C-A-P-C-O-G DOT O-R-G SLASH AIR QUALITY. BE AIR AWARE TO HELP PROTECT YOUR FAMILY. A MESSAGE FROM THE CENTRAL TEXAS CLEAN AIR COALITION.

For KLZT, the Spanish-language station, Emmis translated this message into Spanish for that audience.

CAPCOG also created a dedicated page with a prominent link featured at the URL referenced in the radio ad that would help individuals wishing to sign up for air quality alerts through TCEQ or EPA to do so.

Some of the key metrics used in measuring outcomes from a radio advertising campaign are:

- Average Quarter-Hour (AQH) Persons: the average number of persons listening to a particular station for at least five minutes during a 15-minute period;
- Net reach: the number of different persons reached in a given schedule;
- Gross Impressions (GIs): the sum of the Average Quarter-Hour Persons audience for all spots in a given schedule; and
- Frequency: the average number of times a person is exposed to a radio spot schedule (GIs divided by Net Reach).

This first advertising campaign is estimated to have achieved a net reach of 758,300 in the Austin-Round Rock MSA (759,300 total, including 1,000 outside of the MSA). The average audience member listening to these stations during the advertising campaign would have heard these ads an average of 2.2 times (the average frequency). The campaign made a total of 1,678,200 gross impressions in the MSA (1,681,800 total), at an average cost of \$9.54 per 1,000 GIs, a measure known as "cost per thousand." This schedule achieved 6,993 GIs within the MSA per ad run. The table below shows the net reach, frequency, and GIs for this first campaign, including for targeted sub-groups.

Table 9: May/June CAPCOG Radio Advertising Outcomes by Targeted Sub-Group

| Sub-Group | Net Reach | Frequency | Gross Impressions |
|--------------------------------|-----------|-----------|--------------------------|
| Bastrop County | 31,900 | 2.1 | 68,400 |
| Caldwell County | 11,200 | 1.6 | 18,000 |
| Hays County | 71,700 | 2.2 | 158,400 |
| Travis County | 463,400 | 2.2 | 1,040,700 |
| Williamson County | 180,100 | 2.2 | 392,700 |
| Hispanic⁴ | 133,200 | 2.4 | 315,000 |
| Parents with Children < 18 y/o | 298,600 | 2.3 | 682,800 |
| MSA Total | 758,300 | 2.2 | 1,678,200 |

⁴ "Hispanic," as used by the ratings agency that provides these data, refers to anyone who self-identifies as "Hispanic" AND speaks Spanish.

During this advertising campaign, CAPCOG posted prominent link on its main air quality page that would take a visitor to various options for signing up for air quality alerts, enabling analysis of whether listeners to the radio ads visited the website and signed up for the alerts.

August/September Radio Ad Buy

CAPCOG's second radio advertising campaign ran from August 25-September 28. This time period was selected because it is typically when the region sees its highest ozone levels, and also because – with school starting again – parents of children were thought to perhaps be more receptive to air quality messages during that time.

CAPCOG conducted a competitive procurement designed to reach the maximum number of people possible at least three times during this period, given the budget available. Radio companies were asked to submit quotes for drive-time (6 am - 10 am and 3 pm - 7 pm, Monday-Friday) advertising on each station they owned for schedules that would achieve a target frequency of at least 3.0 (meaning the average listener would hear the ads 3.0 times over the course of the entire campaign). This frequency is often thought to be the level of exposure to advertising necessary to have the desired impact⁵.

Once quotes were compiled, CAPCOG then analyzed the data and selected the combination of stations that would result in maximum cost-effectiveness for the campaign, measured in dollars per person, based on the AQH persons during these drive-time periods.

The cost for this advertising buy was \$53,825.00. An additional \$600 was spent in order to obtain permission to use the radio ads copyright-free on CAPCOG's website and distribute the file to regional partners. Accounting charges and indirect charges brought the total for this purchase up to \$59,219.75.

A total of 450 thirty-second radio spots were run during this period on six stations, including one Spanish-language station (KLTZ). The number of spots run on each station is listed below.

| Table 10: Radio Advertising Spots, August 25-September 28, 201 |
|--|
|--|

| Station | Monday-Friday 6 am – 10 am | Monday-Friday 3 pm – 7 pm | Total Spots |
|---------|-------------------------------|------------------------------|----------------|
| KKMJ FM | 25 | 50 | 75 |
| KLBJ AM | 25 | 25 | 50 |
| KPEZ FM | 65 | 65 | 130 |
| KBPA FM | 40 | 35 | 75 |
| KLZT FM | 25 | 25 | 50 |
| KASE FM | 35 | 35 | 70 |
| TOTAL | 215 | 235 | 450 |

Counting the associated CAPCOG charges, these ads cost \$131.60 per spot.

⁵ http://avenueright.com/entries/71/optimum-scheduling-for-radio-advertising-frequency-is-key

The first ad was a "Back to School" message that targeted parents of school-aged children, encouraging them to take steps to reduce their emissions. These ads ran from August 25 – September 9. The ads were translated into Spanish for KLTZ.

FOR CENTRAL TEXAS, BACK-TO-SCHOOL ALSO MEANS BACK-TO-AIR
POLLUTION. INCREASED TRAFFIC AND HEAT LEAD TO SOME OF THE WORST
AIR POLLUTION RIGHT AS SCHOOL STARTS AGAIN. AIR POLLUTION CAN MAKE
IT DIFFICULT TO BREATHE FOR CHILDREN, SENIORS, AND PEOPLE SUFFERING
FROM ASTHMA. YOU CAN DO YOUR PART TO KEEP THEM HEALTHY BY
REDUCING EMISSIONS WHILE ALSO SAVING MONEY. HOW CAN YOU HELP?
TRY CARPOOLING, AVOID SIDE TRIPS, AND LIMIT IDLING WHEN PICKING UP
AND DROPPING OFF KIDS AT SCHOOL, ESPECIALLY ON OZONE ACTION DAYS.
BE AIR AWARE. A MESSAGE FROM THE CENTRAL TEXAS CLEAN AIR COALITION.

The second ad was a "drive clean" message that encouraged residents of Central Texas to look into grant opportunities to replace older vehicles. These ads ran from September 10 – September 28.

STILL DRIVING THAT OLD CLUNKER? DID YOU KNOW THAT THE STATE OF TEXAS CAN HELP YOU PAY FOR UP TO \$3,000 FOR CERTAIN NEW, LOW-EMISSIONS CARS, SUVS, OR PICKUPS? YOU CAN RECEIVE EVEN MORE TO REPLACE AN OLD A HEAVY-DUTY VEHICLE. TO FIND OUT IF YOU QUALIFY FOR FUNDING AND TO LEARN MORE ABOUT THESE OPPORTUNITIES, ASK YOUR LOCAL DEALERSHIP, OR VISIT CAPCOG DOT ORG SLASH AIR QUALITY. THAT'S CAPCOG DOT ORG SLASH AIR QUALITY. THIS FALL, DRIVE CLEAN ACROSS CENTRAL TEXAS. A MESSAGE FROM THE CENTRAL TEXAS CLEAN AIR COALITION.

This second advertising campaign is estimated to have achieved a net reach of 964,700 in the Austin-Round Rock MSA (969,000 total). The average audience member listening to these stations during the advertising campaign would have heard these ads an average of 3.4 times, producing a total of 3,237,000 GIs (3,239,500 total), at an average cost of \$18.29 per 1,000 GIs. Anecdotally, CAPCOG can report that we received a number of calls during this second period of advertising from people who had heard the radio ads and were interested in finding out more. This was the only time CAPCOG received such calls during the two radio advertising campaigns.

The higher cost per 1,000 GIs compared to the first round of advertising can be attributed to the fact that in the first round, Emmis Communications matched the buy ad for ad as part of its corporate stewardship efforts, but these were not provided by any of the three companies ads were purchased

from as part of the second buy. The table below shows the net reach, frequency, and GIs for this second campaign, including for targeted sub-groups. And while the cost per 1,000 GIs was higher for the second buy, this advertising campaign did achieve a higher efficiency in terms of GIs in the MSA per ad run (7,193 GIs per ad) compared to the first campaign (6,993 GIs per ad).

Table 11: August/September CAPCOG Radio Advertising Outcomes by Targeted Sub-Group

| Sub-Group | Net Reach | Frequency | Gross Impressions |
|--------------------------------|-----------|-----------|--------------------------|
| Bastrop County | 40,600 | 3.4 | 138,500 |
| Caldwell County | 19,400 | 3.7 | 72,000 |
| Hays County | 86,800 | 3.5 | 303,500 |
| Travis County | 583,100 | 3.3 | 1,921,500 |
| Williamson County | 234,800 | 3.4 | 801,500 |
| Hispanic | 298,800 | 4.1 | 1,212,00 |
| Parents with Children < 18 y/o | 394,400 | 3.6 | 1,401,000 |
| MSA Total | 964,700 | 3.4 | 3,237,000 |

As with the first campaign, CAPCOG created a dedicated page with a prominent link featured at the URL referenced in the ad that would help guide listeners to funding opportunities for vehicle replacement. This enabled CAPCOG to analyze whether the ads caused listeners to visit CAPCOG's website in order to find out more about the grant opportunities.

CAPCOG Advertising in the Context of All Air Quality Radio Advertising

In addition to CAPCOG's radio advertising, the City of Austin purchased its own air quality-related advertising, CAMPO purchased radio advertising for the Commute Solutions program, and Travis County purchased radio advertising for the LIRAP program. The following table shows summarizes these buys and provides details on the cost and number of GIs in the MSA for each buy.

Table 12: Air Quality Radio Advertising Purchased by City of Austin, CAMPO, and Travis County

| Organization | Stations | Total Spots | Cost | MSA GIs | Cost Per Thousand |
|----------------|---|----------------|--------------|-----------|----------------------|
| City of Austin | KLBJ-AM, KGSR-AM, and KLZT- FM-HD2 | 315 | \$15,105.00 | 1,328,300 | \$11.37 |
| City of Austin | KUT and KUTX | 274 | \$25,000.00 | 1,379,600 | \$18.12 |
| САМРО | KUT and KUTX | 174 | \$16,143.696 | 824,900 | \$19.57 |
| Travis County | KBPA-FM, KLZT-FM, and KLZT- FM-HD2 | 146 | \$8,950.00 | 1,186,800 | \$7.54 |
| CAPCOG | KROX, KLBJ-AM, KBPA-FM, and KLZT-FM | 240 | \$14,730.00 | 1,678,200 | \$8.78 |
| CAPCOG | KKMJ-FM, KLBJ-AM, KBPA-FM, KPEZ-FM, KLZT-FM, KASE-FM | 450 | \$53,825.00 | 3,237,000 | \$16.63 |
| Combined | n/a | 1,599 | \$133,753.69 | 9,634,800 | \$13.88 |

⁶ Cost of CAMPO advertising estimated based on cost per ad spent up to October. CAMPO has not been billed for the October advertising yet.

One way to compare the scope of the radio advertising purchased by CAPCOG using the funding provided by COA is to compare CAPCOG's radio ad buys to all of the above in terms of inputs, outputs, and outcomes. The following table shows a comparison of CAPCOG's radio advertising compared to all of the air quality-related radio advertising procured during 2014.

Table 13: CAPCOG Radio Advertising Compared to all Air Quality Radio Advertising in 2014

| Data Point | CAPCOG % of Total |
|------------------------------------|-------------------|
| Money Spent | 51% |
| Ads Run | 43% |
| Bastrop County GIs | 55% |
| Caldwell County GIs | 48% |
| Hays County GIs | 57% |
| Travis County Gls | 50% |
| Williamson County GIs | 51% |
| Hispanic GIs | 66% |
| Parents with Children < 18 y/o GIs | 56% |
| MSA Total GIs | 51% |

Analysis of Effectiveness of Radio Advertising

Representativeness of Radio Advertising Audience

One objective of the regional outreach and education plan was to ensure that outreach efforts were able to reach key groups roughly in proportion to their share of the MSA's population. By that measure, the CAPCOG radio advertising was quite successful. The metric that is most relevant for the purposes of gauging impact on behavior is gross impressions, since it accounts for both the number of people reached and the frequency with which they are reached. As the chart below shows, the distribution of GIs achieved from CAPCOG's two rounds of radio advertising among the targeted sub-groups closely matches the actual distribution of these groups within the MSA's overall population.

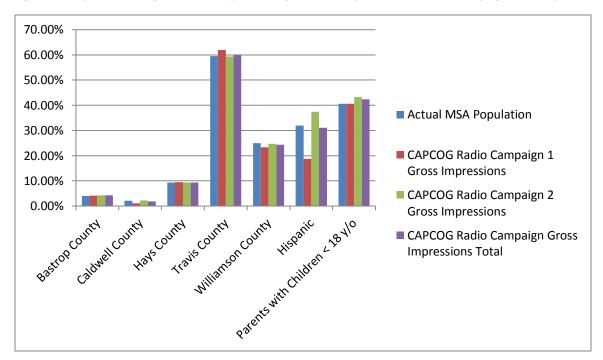


Figure 1: Comparison of Targeted Sub-Group Percentages of MSA Population to CAPCOG Campaign Gross Impressions

The "parents with children < 18 y/o" data for the Austin-Round Rock MSA reflects the percentage of people who are recorded as being a "householder" or "spouse" in a family household in the five-year 2009-2013 American Community Survey (ACS) data for the MSA. The other data reflects the 2013 population count for each county and for the "Hispanic" ethnicity as reported by the Census.

Impact of Radio Advertising on Web Traffic

Since CAPCOG set up specific web pages in conjunction with its radio advertising and, for two of the three ads that were ran, specifically encouraged listeners to visit its website, CAPCOG analyzed its website traffic for 2014 in order to detect any patterns linked to the radio advertising. The following figure shows the average visits each month to CAPCOG's main air quality page and the special pages created just for these advertising campaigns.

⁷ U.S. Census Bureau. "Table B09019: HOUSEHOLD TYPE (INCLUDING LIVING ALONE) BY RELATIONSHIP: Total population" *2009-2013 American Community Survey 5-Year Estimates*. http://factfinder.census.gov/bkmk/table/1.0/en/ACS/13 5YR/B09019/320M200US4812420

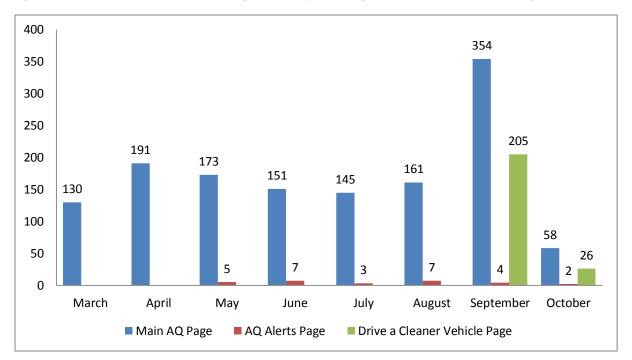


Figure 2: CAPCOG Website Traffic for Main Page, Air Quality Alerts Page, and Drive a Cleaner Vehicle Page

On average, CAPCOG's main air quality page received 4.75 visits per day for all periods other than 9/10 – 9/26, when the "Drive a Cleaner Vehicle" ad was being run. While that ad was running, however, average daily visits increased almost fourfold – to 18.24 visits per day. There was no evidence that the first campaign drove any listeners to CAPCOG's website, and during the first part of the 2nd campaign, the ad did not specifically prompt the listeners to visit CAPCOG's website. Given that the "Drive a Cleaner Vehicle" message was only delivered during half of the 2nd campaign, it is possible to estimate that the gross impressions with this message was about ½ of the total for that campaign. The total 231 visits to the dedicated page for cleaner vehicle funding, therefore, required about 1,619,750 gross impressions, or 7,012 gross impressions per visitor.

Analysis of Results from Regional Survey

CAPCOG conducted a regional phone survey from September 29 – October 10 through Customer Research International (CRI), the firm that had previously conducted the phone surveys for the Central Texas Sustainability Indicators Project. CAPCOG received 601 responses across the MSA from respondents who were randomly selected from phone lists containing 50% cell phones and 50% land lines. The survey provided a number of insights that will be useful for regional air quality planning. One of the questions asked, "have you heard any radio ads about air quality recently?" A total of 11.81% of respondents answered "yes," while 87.02% responded "no," and 1.16% responded that they didn't know.

It is not immediately clear from the survey that the radio advertising made any significant impact on awareness of ozone issues, perception of the seriousness of the threat of ozone, or behavior. In analyzing responses to the following questions, there did not appear to be statistically significant

differences between respondents who had reported recently heard the radio ads and those that had not:

- "Are you familiar with Ozone Action Days?"
- "Do you believe that higher ozone levels pose a very serious threat to you and your family, somewhat serious, not so serious, or not threat at all?" and
- "Do you do any of the following differently on Ozone Action Days?"

The results analyzed, however, do not control for other variables that might influence the responses to these questions. CAPCOG is planning on conducting a more extensive analysis that does take other variables into account, and will make that analysis available to COA when it becomes available.

Establish Baseline Metrics

One of the key activities identified in the plan for 2014,

 Establish good baseline metrics for measuring the impact of the regional outreach and education efforts.

Some of the activities undertaken in 2014 that can help establish such metrics were the ongoing Clean Air Partners Program reporting, the reporting conducted by CAPCOG for the annual regional air quality report, and the regional survey conducted in late September and early October, as well as the data reported above for events and radio advertising. Since one of the key objectives of this activity is to be able to translate outreach and education activities into quantifiable emission reductions, it is important to express these metrics in terms that can be compatible with well-defined methods for quantifying emission reductions. The Outreach and Education Subcommittee will discuss and decide upon set of metrics to use moving forward.

Other Activities

One of the other activities pursued in 2014 was a concerted effort to get the word out about the availability of the Emission Reduction Incentive Grant (ERIG) funding through the Texas Emission Reduction Plan (TERP), administered by TCEQ. CAPCOG staff obtained a list of TERP grant recipients in the region in prior years and placed phone calls to them notifying them of the availability of the funding and offering assistance to them in their grant application process. CAPCOG staff provided direct assistance to three entities – Austin White Lime, CapMetro, and the City of Round Rock – as part of this effort.

Overall Evaluation of Performance & Recommendations for 2015

The regional air quality outreach and education effort is much better organized and focused now than it was a year ago, and thanks to this coordination, radio advertising and event staffing in particular were pursued in a more rational and organized manner. Thanks to Travis County, there is now also a dedicated, free way to procure high-quality printed material for outreach efforts. The data that was

collected in 2014 will provide an important foundation for future work and will help regional partners better understand the relative effectiveness of various outreach and education techniques.

There were several areas in which the regional effort did not fully meet the goals and priorities set out at the beginning of the year. Some of this will be helped by the added staff at CAPCOG – the Air Quality Program is now at 2.5 FTE, rather than the 1 FTE that was in place in March, July, and August, and one of the new staff members is primarily focused on outreach and education efforts, allowing for more sustained focus on all of the various outreach and education priorities. In other cases, the shortfalls in 2014 may require the Outreach and Education Subcommittee to rethink the scope of what can be achieved with the personnel who have been available to perform the work involved. It may be possible to augment these efforts by recruiting additional staff members from the CACAC to participate, or to recruit citizen volunteers throughout the region to help with these efforts.

In the case of radio advertising, which was a large part of the effort in 2014, there is some evidence — both from increases in web traffic and responses to the regional survey — that significant portions of the population were receiving the messages and may even have been moved to take some action, but additional research on this will be needed. In the future, some additional research and message-testing ahead of time may be warranted to ensure that the ads run are carrying messages that can be shown to have impacts on behavior.

2015 will be a very important year for the nonattainment designation process for EPA's proposed ozone standards. It will be one of the three years used for the designation process, regardless of the time frame EPA chooses to use. Ensuring that existing commitments are fully implemented and that any additional commitments are secured in time to have an impact on the nonattainment designation process should be the priority. With this in mind, CAPCOG recommends the following for 2015.

 Prepare a short list of high-impact emission reduction measures that can be implemented in less than a year to focus the 2015 outreach and education messages on.

Any measures that can be implemented by the start of the 2016 ozone season – or even as late as May 2016 – should be prioritized over longer-term measures. This list should be specific to our region's emissions inventory and focus on those measures that are: a) going to achieve maximum emission reductions and, b) are simple to implement and track.

 Focus the message for 2015 on the urgency of reducing emissions to reduce the risk of being designated nonattainment.

The most pressing reason for emission reductions in 2015 specifically – rather than emission reductions in general – is the impact that they could have on a potential nonattainment designation. With TCEQ's chief Toxicologist and all three Commissioners publicly and prominently announcing their belief that the EPA's proposed ozone standards will not provide any added health benefits, it may be more difficult to persuade certain members of the community that they should voluntarily reduce emissions because of

the ozone health benefits. A focus on the need to reduce emissions in order to avoid a nonattainment designation can provide a justification for the urgency of action and avoid the need to get into the disagreements between EPA and TCEQ on the science behind ozone standards.

 Conduct outreach to the local TV and radio broadcasters and meteorologists regarding the EPA's ozone standard proposal.

CAPCOG's 2014 Regional Survey showed that the vast majority of people find out about ozone and air quality through their local weather forecasts and radio reports. Making sure that the people in these news organizations have the best information available about ozone air pollution will therefore be important to making sure that the general public is getting the right information about air pollution. The lack of Ozone Action Days in 2014 is likely to have had a significant impact on awareness levels. One potential strategy might be to try to get the broadcasters and meteorologists to focus on the air quality forecasts rather than the Ozone Action Day alerts.

• Coordinate radio advertising buys and message development among City of Austin, Travis County, CAMPO, and CAPCOG.

A lot of the radio advertising that was run in 2014 had already been purchased by the time the Outreach and Education Plan was finalized, so it was not possible to fully synchronize or coordinate the radio advertising across organizations. This coordination should include each organization specifically identifying the objective of their advertising buy, the target audience, the target frequency, the messages that will be run, the schedules for which the ads will be run, and any follow-up work or data collection that will be conducted. This will help all of the organizations maximize the utility of these ads and should enable each organization to be better able to achieve their goals.

- Renew efforts to recruit key institutional actors to reduce emissions, including:
 - Independent School Districts;
 - Universities and Colleges; and
 - Health Institutions.

These types of institutions have not been fully engaged in the regional effort, and have numerous opportunities to contribute to regional emission reductions. They are also important entities in helping provide protection for sensitive populations when high ozone levels do occur.

 Develop "commitment cards" and online forms to help track individual and organizational commitments and conduct follow-up at the end of the ozone season through e-mails and phone calls. Air North Texas has some great examples of these commitments on their website. These can be repurposed and geared towards Central Texas fairly easily. People are much more likely to actually take action if they have made a commitment to do so.

- Improve the resource efficiency of staffing events.
 - Be strategic about which events to staff.
 - Recruit additional personnel including volunteers to help staff community events and conduct presentations – as part of the regional outreach efforts.

Staffing events is by nature a labor-intensive activity. Beyond labor costs, booth fees and mileage reimbursement required to get professional staff from participating organizations add to the resource requirements for such activities. Compared to other forms of contact such as radio advertising, digital advertising, or direct mail, it is a fairly expensive way to conduct outreach per person contacted. Using data collected in 2014 will help in identifying the highest-impact events to staff in 2014, but recruiting additional people to help with this effort –including volunteers – could greatly augment the effectiveness and efficiency of this strategy. In-person communication can be much more effective than other forms of communication, but making sure to have someone local makes a big difference in the potential impact. The Outreach and Education Committee should consider starting to recruit High School groups, college groups, and other community groups to participate in these efforts.

Conclusion

This report is the final deliverable due from CAPCOG to COA under the 2014 interlocal agreement. It provides COA with a full accounting of how all of the funding was spent, provides a first-of-its-kind accounting of all of the various outreach and education activities undertaken during the ozone season, and provides detailed comparison of those activities to the priorities laid out in the *Outreach and Education Plan* developed under this agreement. If COA has any questions on this report, please do not hesitate to contact CAPCOG's Air Quality Program Manager, Andrew Hoekzema, at (512) 916-6043, or at ahoekzema@capcog.org.