

AGENDA

INFORMATION UPDATE

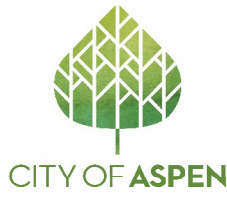
May 24, 2022

5:00 PM,



I. INFORMATION UPDATE

- I.A. 2021 Tourism Promotion Funds
- I.B. 2022 Update on Colorado Parks and Wildlife Human-Bear Conflict Resolution Community Grant Application
- I.C. 2021 Annual Air Quality Report
- I.D. Fleet Electrification Work Session Follow-Up Memo



INFORMATION ONLY MEMORANDUM

MEMO DATE: May 10, 2022

REGARDING: Disbursement of Tourism Promotion Funds

FROM: Pete Strecker, Finance Director

Summary: This information only memo is to update the Council around the disbursement of 2021 lodging tax collections. Staff would like to relay that the increased appropriation amount in the 2022 Spring Supplemental was not fully reflective of the amount desired to release the remainder of 2021 lodging tax collections to the Aspen Chamber Resort Associate (ACRA) and that the variance in spending authority will be included in the Fall Supplemental to remedy this issue.

Details: As is customary, the City of Aspen has limited the release of lodging tax collections received in the Tourism Promotion Fund (130 Fund) in a given fiscal year to Council approved appropriated limit. This limit is set based on conservative projections for the tax, and as such, may not reflect the final collection amount fully by year-end. This was the case in 2021, when both occupancy levels and average daily rate both exceeded expectations.

Ultimately, the amount of lodging tax dedicated to tourism promotion collected in December 2021 was \$666,830 and exceeded appropriation limits by \$412,305, which allowed only for a release of \$254,525 to ACRA prior to the Spring Supplemental. While the intent was there to release the remaining funds with the inclusion of the needed authority in the Spring Supplemental, the supplemental package inadvertently included the \$254,525 amount instead of the \$412,305 amount that was needed, resulting in a delta of \$157,780 still to appropriate.

Staff will proceed with releasing the full amount of 2021 collections to ACRA, but wanted to inform Council of this technical appropriation that will be requested in the Fall Supplemental package to remedy this issue.

CITY MANAGER NOTES:



INFORMATION ONLY MEMORANDUM

TO: Mayor Torre and City Council

FROM: Ginna Gordon, Community Response Supervisor, Aspen Police Department

THROUGH: Linda Consuegra, Assistant Chief of Police - Administration

MEMO DATE: 04/25/2022

RE: 2022 Update on Colorado Parks and Wildlife Human-Bear Conflict Resolution Community Grant Application

REQUEST OF COUNCIL: This memo is informational only. No Council action requested.

SUMMARY:

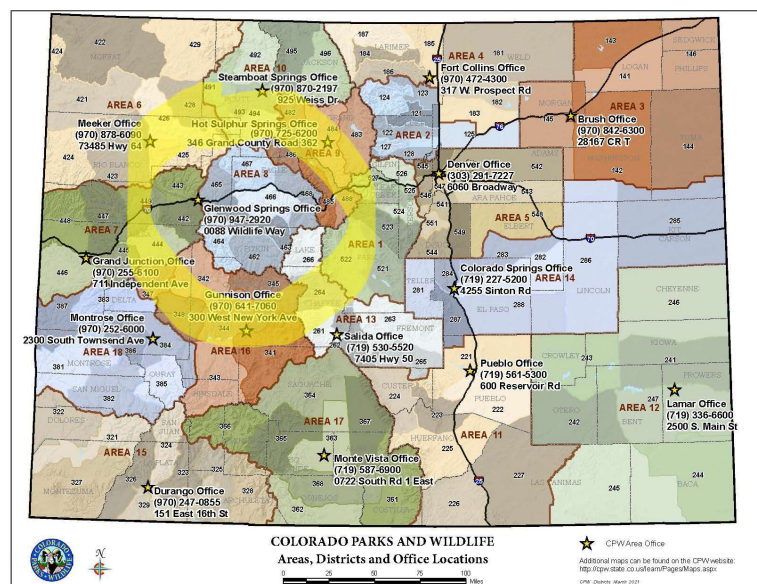
The intent of this memo is to update Council on support and partnership the City of Aspen is providing Colorado Parks and Wildlife (CPW) in submitting a regional grant, with the goal of implementing programs to reduce human bear conflict.

Grant:

CPW has made available grants between \$50,000 and \$200,000 for local governments, NGO's, and community groups amongst others. Projects funded by these grants are intended to prevent conflict with bears and encourage coexistence.

After discussions with CPW we felt the most effective way to leverage this grant funding was to join with the other CPW "Area 8" governing bodies to submit a joint grant request in the amount of \$200,000. Area 8 includes the following (highlighted) land area, including Glenwood Springs, Glenwood Canyon, and Roaring Fork Valley.

If successful in our collective application the City of Aspen, via the police department, will commit up to \$10,000 in matching funds to this project. We feel that due to our location in core bear habitat, the City's commitment to seeking new ways to address human/bear



interactions, and our track record of seeking community buy in and participation in resolving such conflicts, this investment will help move the needle regionally in educating and helping citizens and visitors alike understand the importance of respect for bears in their habitat.

A reminder of recent Aspen bear trends:

2019 - The Aspen Police Department responded to approximately 960 bear calls within the city limits (One of the most active years on record):

- Colorado Parks and Wildlife reported that 20% of their bear calls for the entire State of Colorado in 2019 occurred in Pitkin County.
- 273 calls involving bears gaining or attempting to gain entry, into refuse (trash, recycle, compost) containers.
- 59 calls involving bear home intrusions (These are only the ones that have been reported to the Police and are reflective of a small portion of actual home intrusions.)
- In 2019, the Aspen Police Department responded to 2 incidents where a bear inflicted injuries on a human and the Pitkin County Sheriff's Office responded to one. These instances accounted for 80% of these types of interactions statewide.

2020 was a milder year in respect to bear activity in the City of Aspen. There was a total of 262 bear calls for service. This was a 70% decrease in reported bear activity from 2019 to 2020:

- 14 bear home intrusions.
- 97 calls involving bears gaining or attempting to gain entry, into refuse (trash, recycle, compost) containers.
- There was 1 report of a bear inflicting injuries on a human in Pitkin County during 2020.
- We believe that the ample supply of natural food sources available in 2020, along with the decreased restaurant activity and early business closures, directly correlated with the decline in overall bear contacts for the year.

2021 was another mild bear year with 312 contacts and more activity in September and October due to lower natural food source availability at a time when the bears are undergoing hyperphagia:

- Of note was the renewed partnership between City departments to more effectively to mitigate attractants, identify potential conflicts, educate, and enforce ordinances.

In 2022 further conversation is anticipated on developing a more comprehensive and focused approach to wildlife management and education. This strategy must consider the unique challenges that persist in our community pertaining to attractants, infrastructure, education, and enforcement. See below for how an example of a community that took a more comprehensive and focused approach to their wildlife challenges:

- [People and Bears Live in Harmony in This Wildlife-Friendly Town | Short Film Showcase - YouTube](#) - Canada's Bow Valley program supported by ecologists and wildlife biologists.

CITY MANAGER COMMENTS:



TO: Mayor and City Council

FROM: Jannette Whitcomb, Environmental Health and Sustainability

THROUGH: CJ Oliver, Environmental Health and Sustainability Director

DATE: April 25, 2022

RE: 2021 Annual Air Quality Report

PURPOSE: This memo is to inform Aspen City Council of the 2021 Annual Air Quality Report. No action is needed from Council at this time.

BACKGROUND: The City of Aspen (COA) has been monitoring air quality since the early 1980's. The city monitors particulate matter 10 microns or less (PM₁₀), particulate matter at 2.5 microns (PM_{2.5}) and ground level ozone (O₃) using air quality monitors that provides high quality data to city staff and the community. In May of 2021, the Colorado Department of Public Health and Environment (CDPHE) began providing ground level ozone and PM_{2.5} forecasting for the Aspen area as well as publishing Aspen's air quality data on www.AirNow.gov.

DISCUSSION: The protection of Aspen's airshed is dependent on the City's values of stewardship, partnership, service, and innovation. Numerous City departments and regional partners play a vital role in developing and upholding Aspen's air quality protection programs and actions. The 2021 Annual Air Quality Report catalogs the air quality protection efforts taken by the City of Aspen and our partners, outlines air quality and its importance, and presents recommendations to withstand and combat negative air quality impacts now and into the future.

In 2021, the city partnered with Pitkin County to increase wildfire smoke communication. We developed a new air quality webpage, www.pitkinemergency.org/airquality, that connects people to local air quality information via www.AspenAirQuality.com. This new webpage also contains details on CDPHE air advisories, the www.Fire.AirNow.gov (Fire and Smoke map), as well as steps people can take to protect themselves against wildfire smoke. The Pitkin Alert notification system directs people to this website during air pollution events affecting our area. In 2021, eleven (11) Pitkin Alerts were issued for wildfire smoke and Air Quality Advisories. Last August, the Aspen-area experienced 7- days in a row with air quality advisories for poor air. Aspen's air quality into the foreseeable future will be vulnerable to wildfires and other natural events due to climate change.

Aspen overall has good air quality. Aspen did not exceed any of the Environmental Protection Act's National Ambient Air Quality Standards (NAAQS) for criteria pollutants, including ozone and particulate matter. Definition of the standards as well as the COA's current standing are provided below:

- Ozone – The standard is an annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years, not to exceed 70 ppb (parts per billion). To date, Aspen has not exceeded the ozone standard. Aspen's 3-year ozone 8-hour average is 63 ppb.
- PM₁₀ – The standard is not to exceed a 24-hour average of 150 ug/m³ (micrograms per cubic meter of air) more than once per year over a 3-year period. To date, Aspen has not exceeded the PM₁₀ standard. In 2021, Aspen's highest reading of PM₁₀ for 24hr average was 88 ug/m³.
- PM_{2.5} – The standard is an annual arithmetic mean of 12 ug/m³, and the 3-year average of the annual 98th percentile of 24-hour PM_{2.5} concentrations no greater than 35 ug/m³. To date, Aspen has not exceeded the PM_{2.5} standard. In 2021, Aspen's annual arithmetic mean was 6.1 ug/m³ and the annual 98th percentile was 25 ug/m³.

Staff's goal is to ensure that the community continues to have good air quality and access to local air quality information during an air quality event. With our partners, staff will continue to improve Aspen's air quality messaging and community support during air quality events, with special attention to wildfire smoke.

ENVIRONMENTAL IMPACTS: Short- and/or long-term exposure to air pollution has been associated with a wide range of human health effects including increased respiratory symptoms, hospitalization for heart or lung diseases, and even premature death. Specific groups within the general population may have a greater risk of pollution effects due to a variety of factors such as age, lung or heart conditions, and intensity of outdoor activity.

To prevent these impacts, the city provides local, up to date air quality information to assist the community in making mindful decisions when the air quality is impaired.



AIR QUALITY REPORT

2021

EXECUTIVE SUMMARY

Aspen's clean, clear skies are a cherished asset to our mountain community. However, our air quality has not always been a point of pride. For many years in the 1980s, Aspen failed to meet Environmental Protection Agency (EPA) standards for particulate matter 10 microns or less (PM₁₀). In response to our pollution history and in efforts to improve, Aspen has a robust air quality program. The protection of Aspen's air shed is dependent on the City of Aspen's shared community values of stewardship, partnership, service, and innovation. Numerous City departments and regional partners play a vital role in Aspen's air quality programs.

Historically, Aspen's high particulate pollution days were in the winter months and caused by local sources. Now with climate change, western states, including Colorado, are experiencing extreme wildfire seasons causing high pollution events in the summer more than the winter. As a result, Aspen is currently experiencing an upward trend in PM₁₀ and PM_{2.5} levels.

In 2021, the City partnered with Pitkin County to increase wildfire smoke communication. We developed a new air quality webpage, pitkinemergency.org/airquality, that connects people to local air quality information via AspenAirQuality.com. This site provides details about Colorado Department of Public Health and Environment (CDPHE) air advisories, includes the Fire.AirNow.gov Fire and Smoke map, and outlines steps people can take to protect themselves against wildfire smoke. The [Pitkin Alert notification system](#) directs people to this website during air pollution events affecting our area.

Aspen's air quality will remain vulnerable to wildfires and other natural events. Our goal is to ensure that the community has access to local air quality information so they can understand the potential health impacts and protective actions one can take during an air quality event.

This report catalogs the air quality protection efforts taken by the City of Aspen and our partners, outlines air quality and its importance, and showcases Environmental Health and Sustainability's Air Quality Work Plan.

Program Contact

Jannette Whitcomb

Senior Environmental Health Specialist, Air Quality

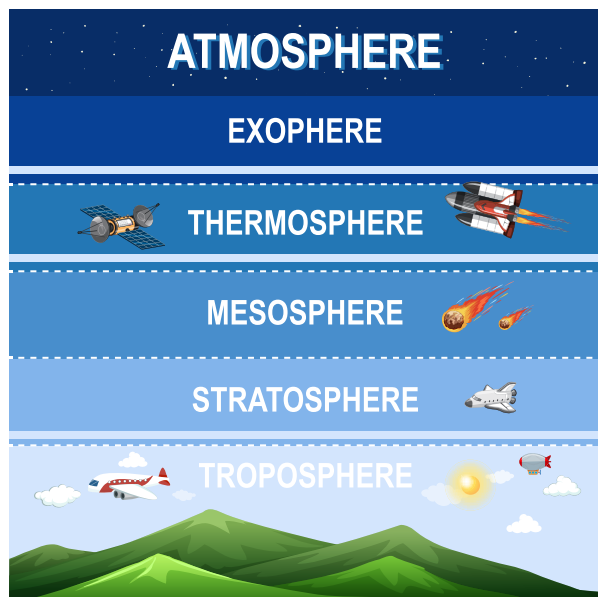
Email: Jannette.Whitcomb@aspen.gov | Phone: 970.920.5069

More Info

AspenAirQuality.com

HOW AIR QUALITY WORKS

Air quality affects our health and wellbeing. The weather can have a significant impact on air quality, as can particulates that penetrate air, such as dirt, soot, and smog. Sunshine, rain, higher temperatures, wind speed, air turbulence, and mixing depths affect the concentration of these added particulates.



Earth's atmosphere is made up of gases surrounding the planet.

Atmospheric warming associated with climate change has the potential to increase ground-level ozone.

The ozone layer exists in the stratosphere. It shields us from most harmful UV sun radiation.

The troposphere is the layer that we live and breathe in. The air we breathe is made up of 78% nitrogen, 21% oxygen, and 1% argon, carbon dioxide, and other gases.

The Air We Breathe

While air is mostly gas, it also holds lots of tiny particles. These particles are called aerosols. Some aerosols—like dust and pollen—are picked up naturally when the wind blows. Air can also carry particles that cause air pollution, such as the soot, smoke, and other pollutants from car exhaust and coal and oil-fired power plants. Air pollution occurs when substances, such as particles and gases, reach harmful concentrations making it difficult to breathe or causing negative health impacts over time.

AQI: AIR QUALITY INDEX

Air quality changes from day to day or even hour to hour - like the weather. Aspen uses the EPA's Air Quality Index (AQI) tool to understand current air quality and pollution levels. The higher the AQI value, the greater the level of air pollution, and the greater the health concern. Aspen's AQI is calculated using data from air quality monitors.

Think of the AQI as a yardstick that runs from 0 to 500.

AQI levels above 100 are considered unhealthy for sensitive populations, including older adults, children, and people with respiratory and heart conditions. When AQI values go above 150, air quality is considered unhealthy for everyone.

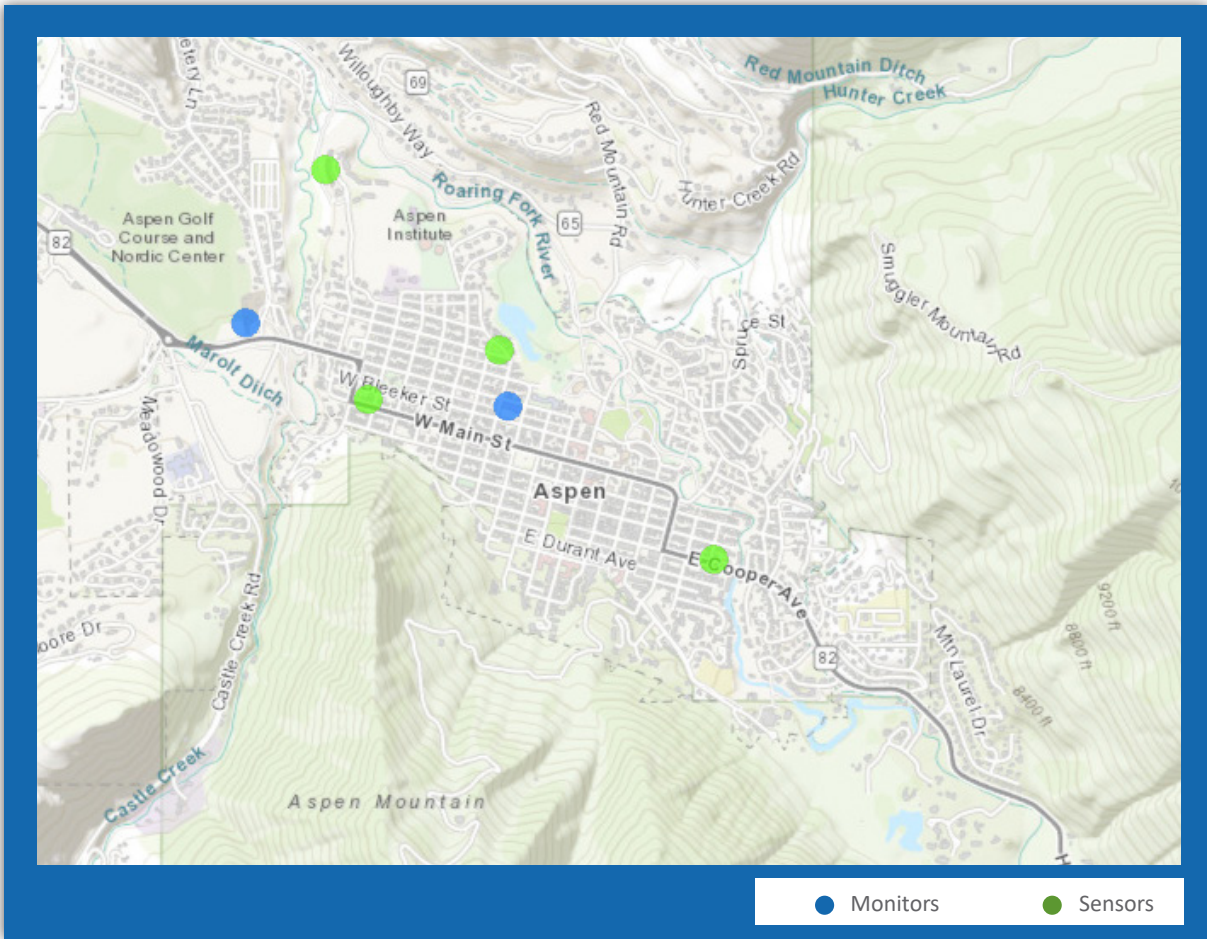
Air Quality Index	0 - 50	51 - 100	101 - 150	151 - 200	201 - 300	301 - 500
	Good	Moderate	Unhealthy for Sensitive Groups	Unhealthy	Very Unhealthy	Hazardous

HOW AIR QUALITY IS MEASURED

Good air quality relates to the level the air is free of pollutants. Air quality is determined by assessing a variety of pollution indicators, including the use of sight and smell, as well as air quality monitors and sensors. The key difference between the two is that governments rely on air quality monitors for regulatory and health-based decision-making while sensors do not meet EPA standards and can be installed by anyone. Aspen has a Teledyne ozone monitor and a Grimm particulate monitor that are federally rated/equivalent rated by the EPA.

MONITORS		SENSORS	
ADVANTAGES	LIMITATIONS	ADVANTAGES	LIMITATIONS
Meet EPA requirements	Expensive to purchase and maintain	Purchased and operated by anyone	Do not meet EPA requirements
Regularly maintained and more accurate	Require oversight by an air scientist	Affordable; installed outside of a building	Less accurate; can report higher than actual levels
Data used for assessing health risks	Require a controlled environment	Placed in many locations to find pollution hot spots	Not routinely cleaned or calibrated
Data used for forecasting and modeling	Monitor placement is limited	Data used for immediate air quality conditions	Air quality assessments are not official

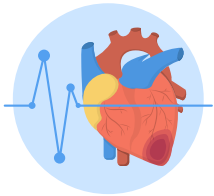
Monitors & Sensors in Aspen



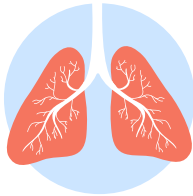
AIR QUALITY AND YOUR HEALTH

The health effects of air pollution are serious and hard to escape. Microscopic pollutants in the air can slip past our body's defenses and can cause damage to our lungs, heart, and brain. Understanding how these pollutants impact the air and our health is important, as is taking personal action during an air quality event.

Health Effects of Air Pollution



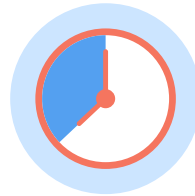
Stress to Heart



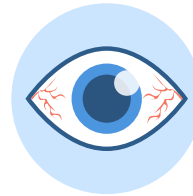
Stress to Lungs



Asthma



Shortened Life Span



Eye Irritation



Harm to Blood

Ozone

Ground level ozone is a pollutant that forms in the air rather than being directly emitted, like from a tailpipe. Ozone forms when the right mix of nitrogen oxides (NO_x) and volatile organics (VOCs) get “cooked” by sunlight. The sources for these precursor pollutants are both natural and man-made.

- Short-term ozone exposure may cause eye, nose, and throat irritation, respiratory symptoms, and decrease lung function and exercise performance, and may occur in both adults and children.
- Ground level ozone can worsen bronchitis, emphysema, asthma, and reduce exercise performance.
- People with asthma, children, older adults, and people who are active outdoors, are the most at-risk populations.

Particulate Matter

Particulate matter (PM) is a complex mixture of extremely small particles and liquid droplets. PM_{2.5} is associated with the greatest proportion of severe health effects related to air pollution.

PM₁₀ is “inhalable coarse particles” and can be found near roadways and construction sites.

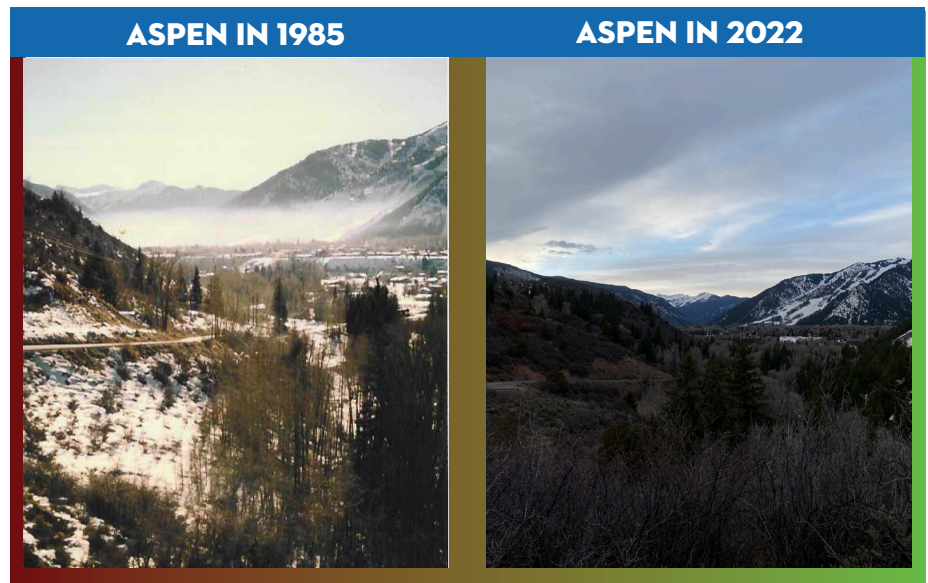
- High levels of **PM₁₀** can decrease lung function and aggravate asthma and chronic obstructive pulmonary disease.

PM_{2.5} is “fine particles” and can be found in smoke and haze. These particles can be directly emitted from sources like fireplaces, restaurant grills, forest fires, or when gases emitted from vehicles react in the air.

- Short-term exposure may cause respiratory symptoms and eye, nose, throat, and lung irritation. It can also decrease lung function and worsen asthma and heart disease.
- Long-term exposure may increase rates of chronic bronchitis and increase mortality from lung cancer and heart disease.
- People with breathing and heart problems, children, and the elderly may be particularly sensitive to **PM_{2.5}**.

ASPEN'S CLEAN AIR STORY

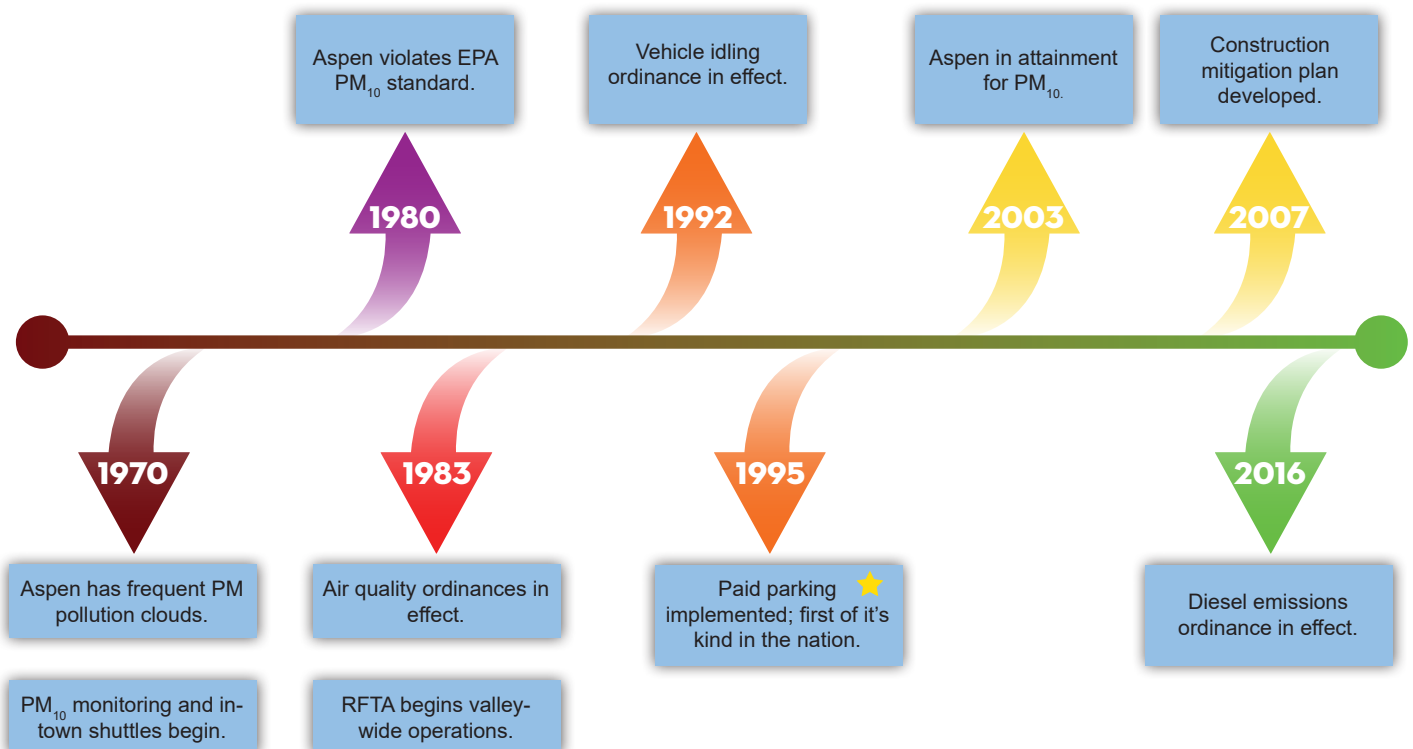
Aspen's spectacular views and closeness to nature are just a couple of reasons why people choose to live in and visit our community. However, Aspen sits in a valley surrounded by mountains making it prone to temperature inversions in which warm air traps cooler air near the ground, preventing pollutants from escaping into the atmosphere.



In the 1980s, Aspen had an air pollution problem. PM_{10} and other harmful pollutants were trapped under winter-time inversions. Pollution from woodburning fireplaces, restaurant grills, vehicle exhaust, and dirt on the roads would sometimes reach unhealthy levels. In 1987, Aspen was designated a PM_{10} non-attainment area by the EPA. In 1991, Aspen's recorded high for PM_{10} was 236, the fourth highest PM_{10} reading ever recorded in Colorado.

Since the 1980s through today, stricter federal emission guidelines for vehicles and local air quality regulations and programs have reduced pollution levels and air quality has improved. In 2003, Aspen was officially back in attainment for PM_{10} .

Community Action for Cleaner Air



CLEAN AIR THROUGH PARTNERSHIPS

Clean air does not come naturally for the Aspen area. It takes continued dedication from the following City of Aspen departments and regional partners to keep our vistas clean and clear. Please note: In 2021, a few of the program outcomes greatly varied from previous years due to COVID-19.

TRANSPORTATION

IN-TOWN SHUTTLE



602,635 Passengers
*through November

DOWNTOWNER



59,469 Passengers

WE-CYCLE



37,200 Rides

Less vehicles on Aspen's streets mean less vehicle exhaust and less dirt being driven over and entrained in the air.

PARKING

CARPOOL PERMITS



37,748 Permits*

*Calculated for June - December only

Parking reduces single passenger vehicular driving by instating parking fees and offering free carpool parking permits.

FORESTRY

POLLUTANTS REMOVED FROM AIR



9,428 Pounds

Forestry cares for Aspen's urban forest. Trees help mitigate air pollution by removing ozone and carbon dioxide from air.

STREETS

DIRT REMOVED FROM STREETS



165 Tons

Through year-round street sweeping accumulated dirt and street sand are removed from our roads before it becomes PM₁₀.

TRAILS

BIKE TRAVEL ON ASPEN TRAILS



17% Increase Since 2017

22 miles of hard surface, soft surface, and single track trails make it easier to get around town.

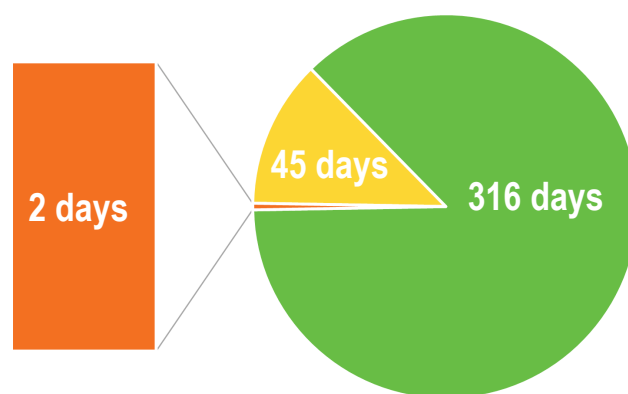
COMMUNITY CALL TO ACTION



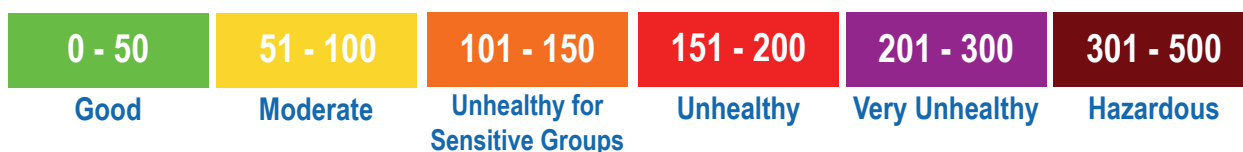
The Aspen community protects our clean air by riding the bus, walking instead of driving, or grabbing the downtowner. Planting trees, not burning wood, and not idling your car help our air quality by reducing pollutants, as well. As wildfires become an increasing problem in our area, it's important to also prepare for a wildfire smoke event. Sign up for Pitkin Alerts, obtain a portable air cleaner, and speak to your doctor about your health and sensitivities to air pollution.

HOW WE MEASURE UP

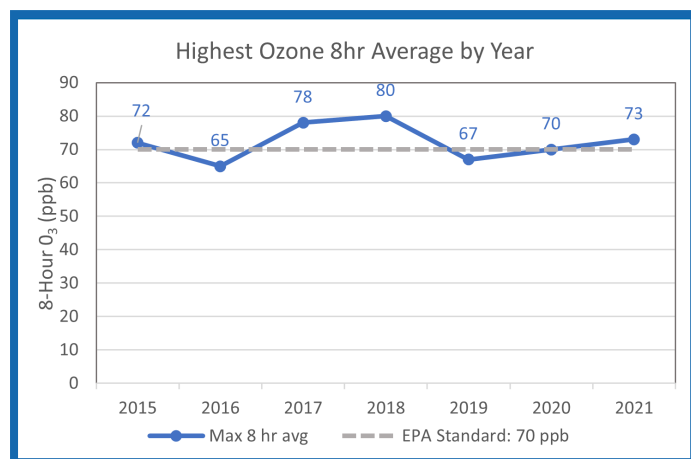
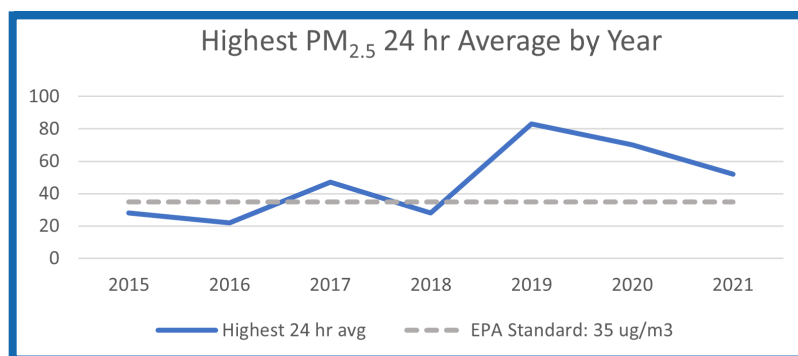
In 2021, the Aspen area had 14 fewer days of good air quality compared to 2020 due to increased air quality events caused by wildfire smoke. This past summer, Aspen experienced more days of moderate air quality with daily spikes of unhealthy air due to the infiltration of smoke from wildfires in Colorado and from the West. Below is a breakdown for each parameter as it relates to the National Ambient Air Quality Standards (NAAQS).



Air Quality Index

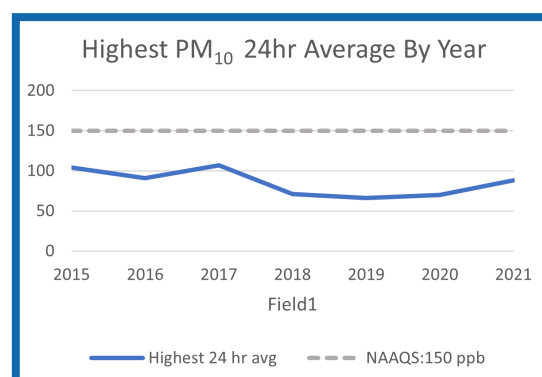


This graph represents the highest PM_{2.5} daily averages by year. Aspen is experiencing an upward trend in fine particulates. Wildfire smoke has had a significant impact on our local levels of fine particulates for the last several years.



This graph represents the highest ground-level ozone 8-hour average by year. Aspen experiences its highest levels of ground-level ozone during the spring due to natural events. Ground-level ozone had most moderate AQI days in 2021 at 46 days, 13 more than in 2020.

This graph represents the highest PM₁₀ daily averages by year. Aspen is experiencing a downward trend for coarse particulates indicating our local air quality programs overall are keeping PM₁₀ levels low.



LOOKING AHEAD

Staff are looking at the near- and long-term future of Aspen's air quality, including how factors such as changing climate, prolonged drought, and wildfires contribute. Aspen's air quality has a high probability to be periodically impacted by wildfire smoke or dust storms from both near and far. Support of Aspen's existing air quality programs, potential new programming, and personal action during air quality events is key to maintaining clean air and a healthy, resilient community.

2022 ACTION ITEMS

Wintertime Pollutants



Residential wood-burning in fireplaces and old wood stoves, as well as street sand and dirt from winter driving, are local PM_{2.5} and PM₁₀ sources that impact air quality.

Tactic: Continuous support of year-round street sweeping.

Tactic: Continuous support for Aspen's fireplace ordinance 13.08.070.

Tactic: Introduce EPA's Burnwise program to promote clean wood-burning techniques.

Air Monitoring Improvements



The City plans to expand its air quality monitoring with a PM_{2.5} sensor network within Aspen's urban growth boundary. This network would put low-cost sensors in neighborhoods which can help inform people sensitive to pollution on when to do outdoor activity during highly variable air quality events like wildfire smoke.

Tactic: Develop and implement a low-cost sensor network.

Tactic: Update AspenAirQuality.com to include the sensor network.

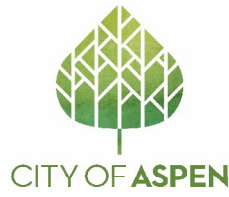
Well-Being Campaign



City of Aspen provides reliable air quality information and tools to the community during air quality events. These resources help in decision-making and taking protection measures such as limiting outdoor activity or using personal protection equipment when outside when the air is bad.

Tactic: Increase Pitkin County Alert registrations; public to receive timely air quality alerts.

Tactic: Community outreach about wildfire smoke preparedness.



FOLLOW-UP MEMORANDUM
CITY COUNCIL WORK SESSION

MEETING DATE: May 17, 2022

FOLLOW-UP MEMO DATE: May 19, 2022

AGENDA TOPIC: Fleet Electrification

PRESENTED BY: Tessa Schreiner, Sustainability Manager, Tim Karfs, Sustainability Programs Administrator

COUNCIL MEMBERS PRESENT: Mayor Torre and Council members Doyle, Hauenstein, Mesirow and Richards

WORK SESSION DISCUSSION SUMMARY: Staff presented City Council with recommendations in support of the Council carbon goal to reduce emissions in the transportation sector and specifically to reduce emissions in the city owned fleet. The two staff recommendations were as follows:

1. Develop a fleet electrification plan to accelerate the adoption of electric and zero emission vehicles in the city fleet which includes both vehicles and equipment; and
2. Sign on to [GoEV City](#) which is a coalition of Colorado based cities and counties pushing for 100% electric and zero emission vehicles by 2050.

City Council approved staff recommendations and provided direction for staff to create an internal fleet electrification plan to be brought back for Council consideration and adoption, and to bring back a resolution to Council for Aspen to sign on to GoEV City.

City Council members provided insights, ideas, and suggestions for how staff recommendations should be performed in addition to and not to detract from concurrent efforts to reduce emissions in the waste sector. Most questions were answered in the meeting and additional information will be provided at future work sessions and in upcoming informational memos.

NEXT STEPS: Staff plans to return to Council with a fleet electrification plan by Q4 2022, and to bring a resolution to City Council to formally join GoEV City this summer.

CITY MANAGER NOTES:
