Washoe County Health District,
Air Quality Management Division

Ozone Advance Path Forward

February 2, 2017

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Table of Contents

Tables

Figures

Appendices

Glossary

AQI	Air Quality Index
AQMD	Washoe County Health District, Air Quality Management Division
AQS	Air Quality System
CO	Carbon Monoxide
COPD	Chronic Obstructive Pulmonary Disease
DV	Design Value
EPA	U.S. Environmental Protection Agency
GDF	Gasoline Dispensing Facility
HA 87	Hydrographic Area 87
KPI	Key Performance Indicator
LEED	Leadership in Energy & Environmental Design
MACT	Maximum Achievable Control Technology
$\mu g/m^3$	Micrograms per cubic meter
mg/m^3	Milligrams per cubic meter
mph	Miles per hour
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_2	Nitrogen Dioxide
NO_x	Oxides of Nitrogen
O_3	Ozone
PM	Particulate Matter
$PM_{2.5}$	Particulate Matter less than or equal to 2.5 microns in aerodynamic diameter
PM_{10}	Particulate Matter less than or equal to 10 microns in aerodynamic diameter
PM_{coarse}	PM_{10} minus $PM_{2.5}$
ppb	Parts per billion
ppm	Parts per million
RICE	Reciprocating Internal Combustion Engine
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
TSP	Total Suspended Particulates
USG	Unhealthy for Sensitive Groups
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compounds
WCHD	Washoe County Health District

EXECUTIVE SUMMARY

The U.S. Environmental Protection Agency (EPA) establishes health-based National Ambient Air Quality Standards (NAAQS) for six criteria pollutants including ozone. The ozone NAAQS was first established in 1979, then strengthened in 1997, 2008, and 2015. Ozone concentrations are strongly linked to population, employment, and on-road vehicle miles traveled (VMT). Growth in these three categories increases air pollutant emissions and ozone concentrations. Current ozone monitoring data show that Washoe County may not meet the 2015 ozone NAAQS. EPA is expected to finalize attainment, or non-attainment, designations in October 2017.

Ever since EPA promulgated the 2008 ozone NAAQS, the Washoe County Health District, Air Quality Management Division (AQMD) has been very proactive to encourage voluntary initiatives to improve air quality and avoid violating the ozone standard. Short-term initiatives targeted technology (i.e., smog check programs and clean school busses) and behavior (i.e., Employee Trip Reduction and Safe Routes to School). Long-term initiatives focused on shaping land use development patterns and the built environment. These initiatives were intended to increase transportation choices and reduce the impacts of on-road motor vehicles.

Shortly after EPA promulgated the 2015 ozone NAAQS, the Washoe County Health District (WCHD) requested to participate in the Ozone Advance program. The Advance program provides resources to help implement additional initiatives to reduce ozone concentrations. EPA formally accepted the WCHD's request in February 2016. This Path Forward provides a blueprint of goals, strategies, and priorities to improve air quality. Success will rely on the collective impact from all of the stakeholders working towards a common goal - A Healthy Community!

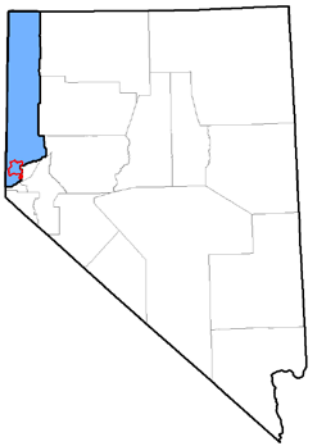
1.0 REGIONAL DESCRIPTION

1.1 Geography and Demographics

Washoe County is located in the northwest portion of Nevada. It is bounded by California, Oregon, and the Nevada counties of Humboldt, Pershing, Storey, Churchill, Lyon, and Carson City (Figure 1.1). The Truckee Meadows is approximately 200 square miles in size and situated in the southern portion of Washoe County. It is geographically identified as Hydrographic Area 87 (HA 87) as defined by the State of Nevada, Division of Water Resources. Most of Washoe County's population lives in and around the Truckee Meadows.

The Truckee Meadows sits at an elevation of 4,400 feet above sea level and surrounded by mountain ranges. To the west, the Sierras rise to elevations of 9,000 to 11,000 feet. Hills to the east reach 6,000 to 7,000 feet. The Truckee River, flowing from the Sierras eastward, drains into Pyramid Lake to the northeast of the Truckee Meadows.

Figure 1.1
Washoe County, Nevada



The 2014 population of Washoe County was 436,797. Approximately 66 percent of Washoe County's residents live in the Truckee Meadows, which includes the cities of Reno and Sparks. Anthropogenic activities such as transportation, manufacturing, freight distribution, and residential wood burning are also concentrated in the Truckee Meadows.

1.2 Climate

The Truckee Meadows is on the boundary between two distinct climatic regimes. The first regime is the dry high desert climate of the western Great Basin. The second regime is that of the alpine Sierra Nevada. The Truckee Meadows experiences large temperature ranges on both a diurnal and an annual scale. During the summer afternoon highs are often above 90° F, but at night the air mass can cool down into the 50s. Normal wintertime lows are in the 20's, but can occasionally reach below 0° F.

Average annual wind speed measured at the Reno-Tahoe International Airport is 6.4 mph. January is the calmest month (4.5 mph) with April being the windiest (8.3 mph). Wintertime (November-January) averages 4.9 mph and summertime (June-August) averages 7.2 mph.

Most of Reno's precipitation falls from November through March in the form of rain and snow. Reno receives an average of 7.40 inches of precipitation per calendar year (1981-2010 climate normals).

2.0 OZONE AND PUBLIC HEALTH

2.1 Health Effects

Ozone, the main ingredient of smog, presents a serious air quality problem in many parts of the United States. Even at low levels, ozone can cause health effects. Ozone is a colorless gas found in the air we breathe. Ozone is good or bad, depending where it occurs. "Good" ozone is present naturally in the Earth's upper atmosphere - 10 to 30 miles above the Earth's surface. This natural ozone shields us from the sun's harmful ultraviolet rays. "Bad" ozone forms near ground level when air pollutants (emitted by sources such as cars, power plants, and chemical plants) react chemically in the presence of sunlight. Ozone pollution is more likely to form during warmer months. This is when the weather conditions normally needed to form ground-level ozone occur.

Several groups of people are particularly sensitive to ozone, especially when they are active outdoors. This is because ozone levels are higher outdoors, and physical activity causes faster and deeper breathing, drawing more ozone into the body.

In general, as concentrations of ground-level ozone increase, both the number of people affected and the seriousness of the health effects increase. Also, more people with lung disease visit doctors or emergency rooms and are admitted to the hospital. When ozone levels are very high, everyone should be concerned about ozone exposure.

People who may be particularly sensitive to ozone include:

- People with lung diseases, such as asthma, chronic bronchitis, and emphysema will generally experience more serious health effects at lower ozone levels.
- Children are at higher risk from ozone exposure because:
    - They often play outdoors in summer when ozone levels are higher.
    - They are more likely to have asthma, which may be aggravated by ozone exposure.
    - Their lungs are still developing.
- Older adults may be more affected by ozone exposure, possibly because they are more likely to have pre-existing lung disease.
- Active people of all ages who exercise or work vigorously outdoors have higher exposure to ozone than people who are less active.
- Some healthy people are more sensitive to ozone. They may experience health effects at lower ozone levels than the average person even though they have none of the risk factors listed above. There may be a genetic basis for this increased sensitivity.

Ozone can:

- Irritate your respiratory system. When this happens, you may cough, feel irritation or soreness in your throat, or experience chest tightness or pain when taking a deep breath.
- Reduce lung function. This can make it more difficult for you to breathe as deeply and vigorously as you normally would, especially when exercising. You may notice that breathing starts to feel uncomfortable and that you are taking more rapid and shallow breaths than normal.

- Inflame and damage cells that line your lungs. Within a few days, the damaged cells are replaced and the old cells are shed - much like the way your skin peels after a sunburn.
- Make your lungs more susceptible to infection.
- Aggravate asthma. When ozone levels are unhealthy, more people with asthma have symptoms that require a doctor's attention or the use of medication. Ozone makes people more sensitive to allergens - the most common triggers for asthma attacks. Also, asthmatics may be more severely affected by reduced lung function and airway inflammation. People with asthma should have an asthma action plan and follow it carefully when ozone levels are unhealthy.
- Aggravate other chronic lung diseases such as emphysema and chronic bronchitis.
- Cause permanent lung damage. Repeated short-term ozone damage to children's developing lungs may lead to reduced lung function in adulthood. In adults, ozone exposure may accelerate the natural decline in lung function that occurs with age.

Many of these effects can lead to increased school or work absences, visits to doctors and emergency rooms, and hospital admissions. Research also indicates that ozone exposure can increase the risk of premature death from heart or lung disease, although more research is needed to understand how ozone may affect the heart and cardiovascular system.

3.0 AIR QUALITY IN WASHOE COUNTY

3.1 Air Pollution Seasons

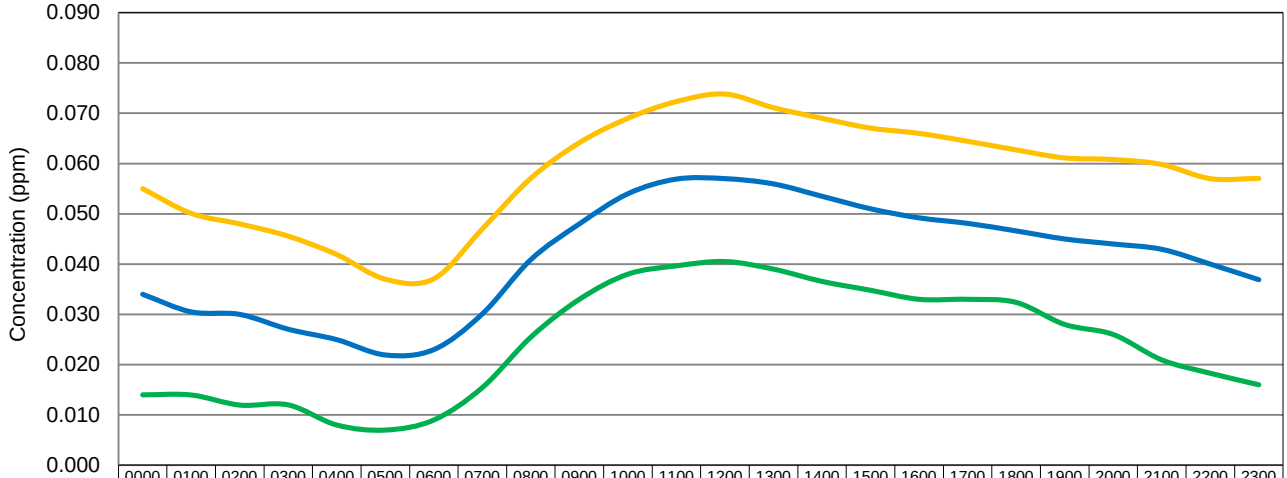
Washoe County experiences two distinct air pollution seasons - summertime ozone and wintertime particulate matter (PM). Wildfire smoke, especially during the summer months, can dramatically increase summertime PM and ozone.

3.2 Typical Summertime Ozone Season

Based on historic monitoring data, below are the characteristics of ozone levels throughout the year in the Truckee Meadows.

1. January through March: This is generally the period with the lowest ozone concentrations during the year because of the cooler temperatures, shorter days, and unsettled weather patterns.
2. April through May: This is a transitional period between spring and summer. 8-hour ozone concentrations above 65 ppb are unusual. Infrequently, meteorological conditions (specifically from late April to early June) are favorable for ozone formation in Northern/Central California followed by stronger than normal west-southwesterly winds conducive to interstate transport of existing pollution downwind towards the Reno/Sparks area.
3. June through August: The highest ozone levels are typically observed during these summer months. Mobile source activity, including VMT, peaks during the summer. Afternoon winds, locally known as Washoe Zephyrs, typically keep ozone concentrations from reaching NAAQS levels. Wildfire smoke and secondary ozone impacts are most likely to occur during these months. The figure below illustrates the typical summertime diurnal ozone pattern at the Reno3 monitoring site.

Figure 3.1
Typical Summertime 1-hour Ozone Diurnal Pattern at Reno3 (2010-2015)



	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
95th %ile	0.055	0.050	0.048	0.046	0.042	0.037	0.037	0.047	0.057	0.064	0.069	0.072	0.074	0.071	0.069	0.067	0.066	0.064	0.063	0.061	0.061	0.060	0.057	0.057
50th %ile	0.034	0.031	0.030	0.027	0.025	0.022	0.023	0.030	0.041	0.048	0.054	0.057	0.057	0.056	0.053	0.051	0.049	0.048	0.047	0.045	0.044	0.043	0.040	0.037
5th %ile	0.014	0.014	0.012	0.012	0.008	0.007	0.009	0.015	0.025	0.033	0.038	0.040	0.041	0.039	0.037	0.035	0.033	0.033	0.032	0.028	0.026	0.021	0.018	0.016

4. September through October: Ozone concentrations typically begin to decrease as mobile source activity, temperatures, and solar radiation also decrease. Wildfire smoke and secondary ozone impacts can still be observed during this period.
5. November through December: Ozone concentrations are typically low during these months because of cooler temperatures and less solar radiation.

3.3 Overview of Ambient Air Monitoring Network

The AQMD began monitoring ambient air quality in Washoe County in the 1960's, and the monitoring network has grown and evolved since that time. As of February 2, 2017, the AQMD operated and maintained eight ambient air monitoring sites. Seven of these sites monitor for ozone. See the most current Annual Network Plan (2016) and Network Assessment (2015) for detailed monitoring network information. Table 3.1 summarizes the ambient air monitoring network as it existed on February 2, 2017.

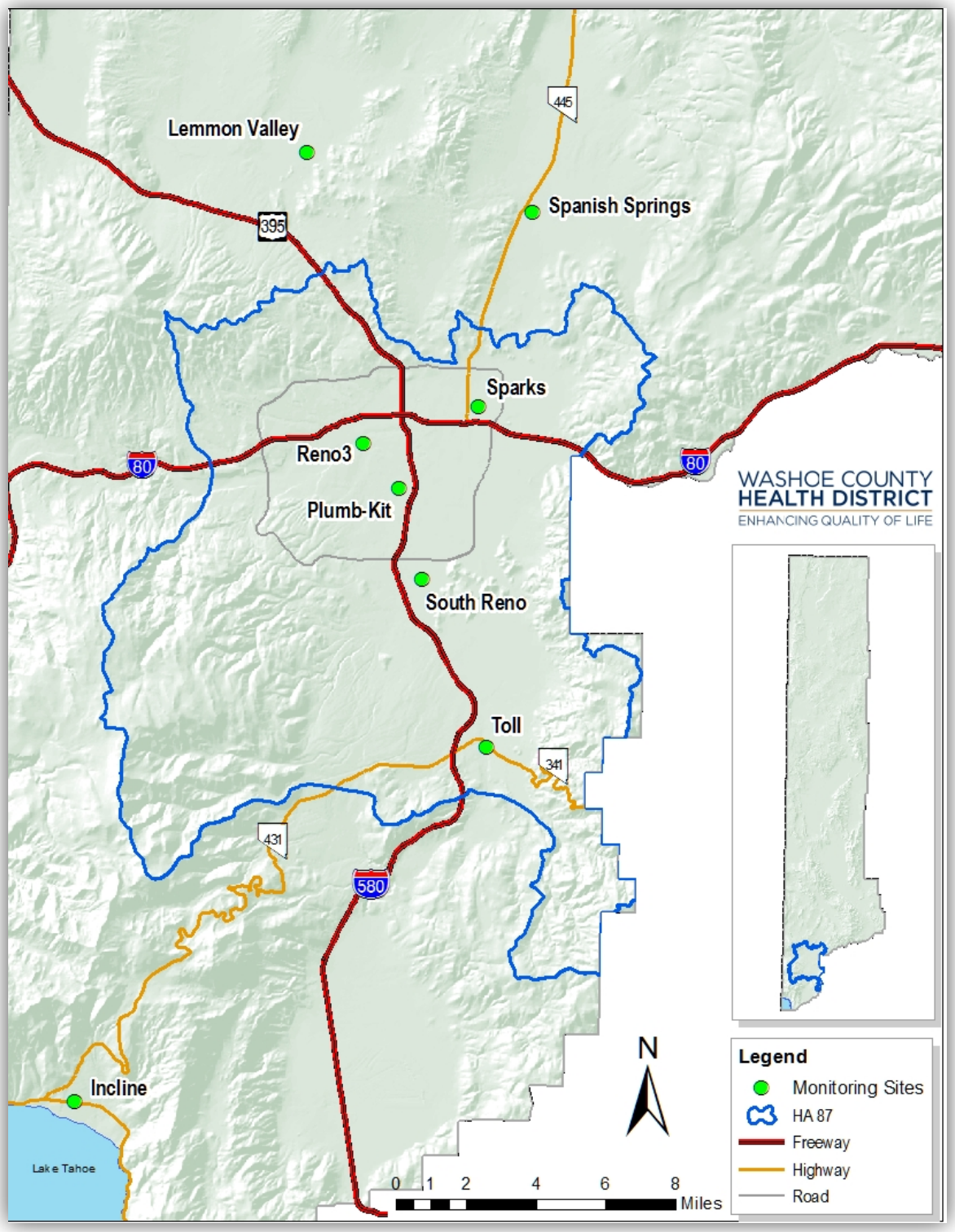
Table 3.1
Ambient Air Monitoring Sites and Parameters Monitored

Site	Ozone	CO	Trace CO	Trace NO	NO_2	NO_x	Trace NOy	Trace SO_2	PM_{10}	$PM_{2.5}$	PM_{coarse}	$PM_{2.5}$ Speciation	Meteorology
Incline	✓												
Lemmon Valley	✓												
Plumb-Kit									✓				✓
Reno3	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
South Reno	✓								✓				✓
Spanish Springs	✓								✓	✓	✓		✓
Sparks	✓	✓							✓	✓	✓		✓
Toll	✓								✓				✓

Figure 3.2 is the Reno3 site (AQS ID 32-031-0016) located in Downtown Reno. Figure 3.3 illustrates the AQMD monitoring network. All sites, with the exception of Plumb-Kit, currently monitor for ozone.

Figure 3.2
Reno3 Air Monitoring Station

Figure 3.3
Washoe County Health District - AQMD Ambient Air Monitoring Sites
(as of February 2, 2017)



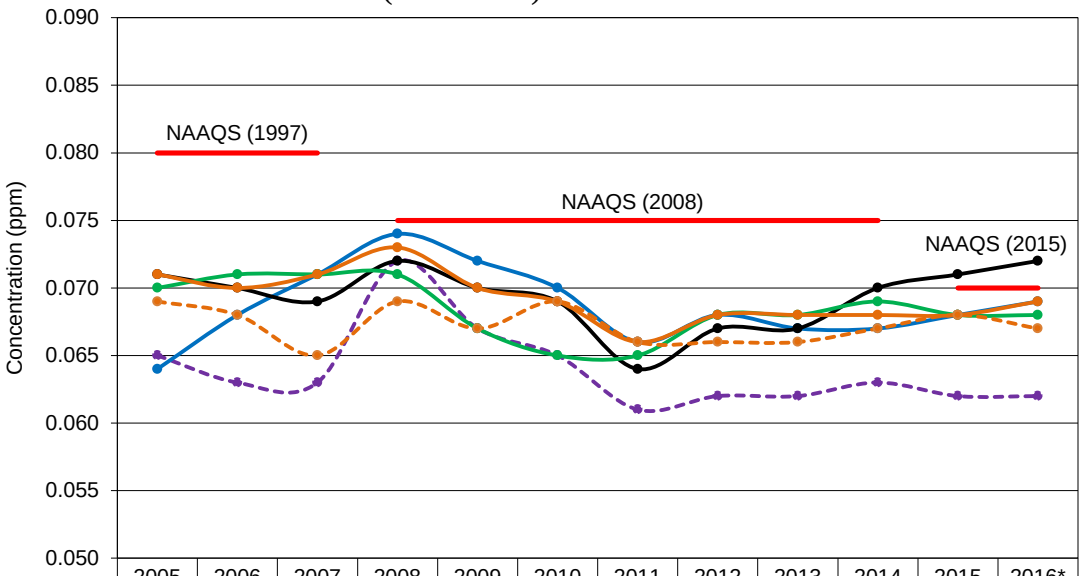
3.4 Attainment Status

All areas of Washoe County currently meet the NAAQS for all pollutants and averaging times. However, portions of Washoe County were at one point designated non-attainment for the following NAAQS: 1) 1979 ozone (1-hour); 2) 1971 Total Suspended Particles (TSP) (24-hour and Annual); 3) 1971 carbon monoxide (CO) (8-hour); and 4) 1987 PM_{10} (24-hour and Annual). Control strategies since the 1970's targeting mobile sources, woodstoves, and dust control have reduced emissions and improved air quality.

3.5 Design Value Trends

Design values are the statistic used to compare ambient air monitoring data against the NAAQS. It's used to determine if an area meets, or doesn't meet, the standard. For ozone, the design value is calculated by taking the average of the 4th high 8-hour concentration averaged over the most recent 3-years for each monitor. Figure 3.4 illustrates ozone design values for each monitor for the previous 12 years. Ozone is a regional pollutant and since 2005, the design value site has fluctuated between Lemmon Valley, Reno3, South Reno, and Sparks.

Figure 3.4
Design Values vs. NAAQS
(2005-2016)



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016*
NAAQS	0.08	0.08	0.08	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.070	0.070
Incline	0.065	0.063	0.063	0.072	0.067	0.065	0.061	0.062	0.062	0.063	0.062	0.062
Lemmon Valley	0.064	0.068	0.071	0.074	0.072	0.070	0.066	0.068	0.067	0.067	0.068	0.069
Reno	0.071	0.070	0.069	0.072	0.070	0.069	0.064	0.067	0.067	0.070	0.071	0.072
South Reno	0.070	0.071	0.071	0.071	0.067	0.065	0.065	0.068	0.068	0.069	0.068	0.068
Spanish Springs	-	-	-	-	-	-	-	-	-	-	-	-
Sparks	0.071	0.070	0.071	0.073	0.070	0.069	0.066	0.068	0.068	0.068	0.068	0.069
Toll	0.069	0.068	0.065	0.069	0.067	0.069	0.066	0.066	0.066	0.067	0.068	0.067

* Preliminary

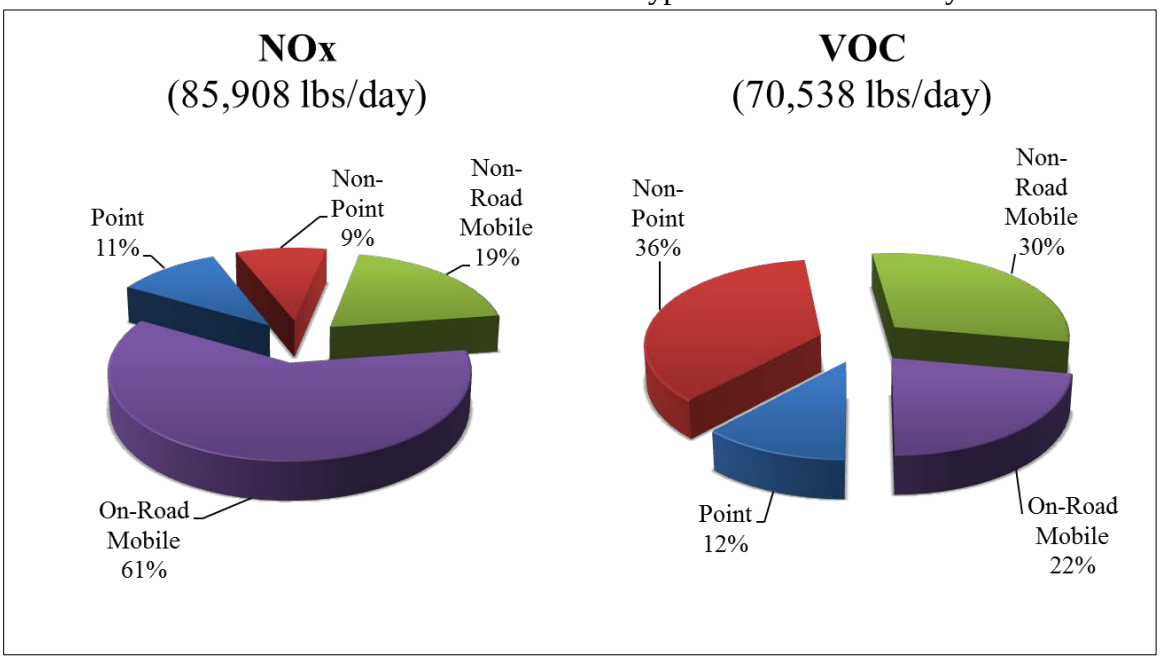
Design values include all valid ozone data submitted to AQS. The AQMD has submitted several exceptional events demonstrations related to wildfire ozone episodes in 2008, 2015, and 2016. Should EPA concur with these demonstrations, those data associated with the exceptional events will be excluded from design value calculations. EPA's concurrence with the 2015 and 2016 events will lower design values to 0.070 ppm or less at all monitors for those years. As of January 2017, EPA has not taken action on these demonstrations.

3.6 Sources of Ozone Precursors

Motor vehicle exhaust and industrial emissions, gasoline vapors, and chemical solvents as well as natural sources emit oxides of nitrogen (NO_x) and volatile organic compounds (VOC) that help form ozone. Ground-level ozone is the primary constituent of smog. Sunlight and hot weather cause ground-level ozone to form in harmful concentrations. As a result, it is known as a summertime air pollutant. Many urban areas tend to have high levels of "bad" ozone, but even rural areas are also subject to increased ozone levels because wind carries ozone and pollutants that form it hundreds of miles away from their original sources.

Mobile sources (On-Road and Non-Road) are the largest categories of ozone precursors. Figure 3.5 illustrates the ozone planning inventory which represents NO_x and VOC emissions for a typical summer day.

Figure 3.5
Ozone Precursor Emissions for a Typical Summertime Day



Source: 2011 Washoe County Periodic Emission Inventory

4.0 HISTORIC AND ONGOING CONTROL STRATEGIES

4.1 Federal, State, and Local Strategies

Control strategies have been in place for decades to reduce anthropogenic impacts to air quality, public health, and the environment. These strategies have been developed and implemented at the federal, state, and local level. They have measurable improvements in air pollution levels and have helped the Truckee Meadows attain and maintain all NAAQS. Below is a list of strategies that have reduced emissions and improved air quality in Washoe County.

Federal Strategies

1. Tier 3 Vehicle Emissions and Fuels Standards
2. Light-Duty Vehicle Tier 2 Rule
3. Clean Diesel Engines
4. Clean Power Plan
5. New Source Performance Standards
6. VOC limits for coatings, solvents, and consumer products
7. Mercury and Air Toxics Standards
8. Light-Duty Greenhouse Gas / Corporate Average Fuel Efficiency (CAFE) Standards
9. Mobile Source Air Toxics Rule
10. Heavy-Duty Vehicle Greenhouse Gas Rule
11. Reciprocating Internal Combustion Engines (RICE) National Emission Standards for Hazardous Air Pollutants (NESHAP)
12. Industrial/Commercial/Institutional Boilers and Process Heaters Maximum Achievable Control Technology (MACT) (and amendments)
13. Requirements to reduce the interstate transport of air pollution

State and Local Strategies

1. Building codes
2. State of Nevada Motor Vehicle Inspection and Maintenance (Smog check) program
3. Heavy-Duty Diesel Idling limitations
4. Gasoline Dispensing Vapor Recovery
5. Other Plans and Programs
    a. Regional Transportation Plans
    b. Master Plans
    c. Regional Plan
    d. Complete Streets Master Plan
    e. Bike and Pedestrian Master Plan
    f. Community Health Improvement Plan
    g. Reno Urban Forestry Management Plan
    h. Keep it Clean
    i. Safe Routes to School

Many of these strategies, plans, and programs continue today and contribute to long-term air quality benefits.

5.0 OZONE ADVANCE PROGRAM

5.1 Description and Benefits

The Advance Program is a collaborative effort by the EPA, states, tribes, and local governments to encourage voluntary emission reductions in attainment areas and continue meeting the NAAQS for ozone and fine particles ($PM_{2.5}$). Attainment areas are those areas that are currently designated as meeting the NAAQS. Through the Advance Program, states, tribes, and local governments work with EPA to take near-term steps to improve local air quality and ensure continued health protection over the long term. Their efforts will reduce air pollution and could provide an improved buffer against future air quality violations.

EPA's Ozone Advance Program began in April 2012 and focuses on maintaining the ozone standards. The Advance Program is flexible in the sense that participants determine their own goals, strategies, and priorities they want to implement. Although there are no guarantees that participation will prevent a non-attainment designation from ever occurring, the actions taken as part of Advance could better position an area to handle non-attainment requirements if they ever do apply.

Ozone Advance makes sense for Washoe County. It encourages local voluntary initiatives to reduce air pollution before pursuing reductions becomes a mandatory requirement. These proactive efforts will position the area to continue to improve air quality and maintain the NAAQS. If Washoe County should violate the NAAQS, then the voluntary initiatives in the Path Forward can feed into a future State Implementation Plan (SIP).

5.2 Request and Acceptance

Washoe County meets the Ozone Advance eligibility requirements, specifically the four points listed below.

1. Washoe County is not currently a non-attainment area for the 1997 8-hour, nor 2008 8-hour ozone NAAQS.
2. Washoe County is not currently a non-attainment area for the 2015 8-hour ozone NAAQS. (Note: EPA is expected to finalize initial designations in October 2017)
3. Washoe County operates and maintains an EPA approved ozone monitoring network that reflects air quality in the county.
4. Existing emission inventory reporting requirements have been met.

On January 26, 2016, the AQMD formally requested to become a participant in the Ozone Advance program. EPA approved the request on February 3, 2016. See Appendix A for the request and acceptance letters.

6.0 STAKEHOLDERS

6.1 Resolutions of Support

Washoe County's Ozone Advance program has top-down support from local and regional organizations. In 2016, resolutions supporting Ozone Advance were adopted by the:

1. Washoe County District Board of Health
2. Reno City Council
3. Sparks City Council
4. Board of County Commissioners
5. Regional Transportation Commission of Washoe County
6. Regional Planning Governing Board

These resolutions encourage sustainable plans, policies, and codes that reduce ozone precursor emissions. Short-term improvements will be seen from cleaner fleets and reduction in single occupant vehicle commuters. Long-term improvements will shape land use patterns and provide transportation choices other than the automobile.

6.2 Planning Priorities

In 2016, the Reno City Planning Commission included air quality as one of their seven priorities for the upcoming year. In addition to Reno City Council's resolution supporting Ozone Advance, this will provide direction to the Planning Commission and Community Development staff to incorporate environmentally sustainable elements into land use decisions.

6.3 Education

A successful Ozone Advance program will require broad support from many agencies and organizations. The AQMD has begun to meet with the community and presented the Ozone Advance program to stakeholders including the:

1. Builders Association of Northern Nevada
2. Associated General Contractors
3. "Reno-Tahoe Clean Cities Coalition" (awaiting official DOE designation)
4. Rocky Mountain Fleet Managers Association
5. Sustainability Partners in Northern Nevada - Land Use and Transportation Resiliency Committee
6. Washoe County Development Services Forum

6.4 Collective Impact

A WCHD goal is to incorporate public health in all policies. Every plan, decision, and action taken in this community has a positive or negative impact to public health. The public, environmental, and economic health of a community is interconnected. A community must successfully achieve all three of these elements to be a healthy community.

6.5 Provisions for Public and Stakeholder Involvement

Stakeholder involvement will be critical for a successful Ozone Advance program. Each stakeholder's plans, decisions, and actions taken are typically discussed in open meetings that are available to the public. Embracing collective impact will ensure public and stakeholder involvement.

7.0 PATH FORWARD

7.1 Goals and Timelines

Near-term air quality goals will emphasize improvements to behavior and technology. These initiatives will reduce VMT through: 1) Behavior change via trip reduction programs, and 2) technology to minimize on-road and non-road motor vehicle tailpipe emissions.

Long-term improvements will be achieved by shaping land use patterns to increase transportation choices and reduce the community's dependence on the automobile. This will be challenging because of the long history of "business as usual" development. Many local governing boards (including the City of Reno, City of Sparks, Board of County Commissioners, Regional Planning Governing Board, and Regional Planning Governing Board) have adopted resolutions supporting land use decisions that reduce vehicle trips and VMT. The AQMD will encourage these boards to expeditiously adopt plans, policies, and codes that support the five goals listed below.

Goal 1: Reduce ozone precursor emissions from on-road motor vehicles

Strategy 1: Minimize VMT and trips.

Priority 1: Ensure smart growth and sustainable elements are incorporated in to the built environment, specifically land use patterns. This will be accomplished through policies and codes that support plans such as the Regional Plan, Master Plans, and Transportation Plans.
Priority 2: Ensure growth and redevelopment meets established criteria for best practices, such as Leadership in Energy & Environmental Design (LEED) Neighborhood Development, to provide transportation options.
Priority 3: Increase the number of employees that have access to Employee Trip Reduction programs and benefits.
Priority 4: Increase the number of Bike Friendly Businesses.
Priority 5: Reduce the on-road motor vehicle portion of the region's transportation mode split.

Strategy 2: Reduce per mile tailpipe emissions from on-road motor vehicles.

Priority 1: Continuously evaluate the effectiveness of the State of Nevada's motor vehicle inspection and maintenance (smog check) program.
Priority 2: Establish a local Clean Cities Coalition and receive certification from the U.S. Department of Energy.
Priority 3: Reduce unnecessary idling.
Priority 4: Increase the region's infrastructure that supports zero emission, near-zero emission, and alternative fuel vehicles.
Priority 5: Increase the region's capacity for truck stop electrification.
Priority 6: Increase the percentage of zero emission, near-zero emission, and alternative fuel vehicles in public and private motor vehicle fleets.
Priority 7: Continuously improve the region's traffic signal synchronization.

Goal 2: Reduce ozone precursor emissions from non-road motor vehicles and equipment

Strategy 1: Minimize tailpipe emissions.

Priority 1: Establish a local Clean Cities Coalition and receive certification from the U.S. Department of Energy.
Priority 2: Reduce unnecessary idling.
Priority 3: Increase the percentage of zero emission and alternative fuel vehicles in public and private motor vehicle fleets.
Priority 4: Require Tier 3 or cleaner diesel construction equipment on public works projects.

Strategy 2: Minimize ozone precursor emissions from gasoline powered lawn and garden maintenance equipment.

Priority 1: Review and improve landscaping ordinances to eliminate unnecessary turf grass requirements.
Priority 2: Implement a residential lawn and garden maintenance equipment exchange and/or bounty program.
Priority 3: Require additional outdoor electrical outlets on new residential construction to increase convenience of corded electric lawn and garden maintenance equipment.

Goal 3: Reduce impacts from heat island effects that contribute to ozone formation.

Strategy 1: Decrease the amount of the region's hardscaped, impermeable, and heat absorbing surfaces.

Priority 1: Replace hardscapes with vegetative landscaping and bioswales.
Priority 2: Increase the region's tree canopy.
Priority 3: Require new parking lots and paved roads to incorporate low impact practices that will also benefit water quality, water supply, stormwater management, air pollutant emissions, and wildlife habitat. Phase in similar requirements for the largest existing parking lots.
Priority 4: Require tree shade requirements for construction of new parking lots (i.e., 50 percent of the paved parking lot surface of any building must be shaded with tree canopies within 15 years), and during change of ownership.
Priority 5: Ensure smart growth and sustainable elements are incorporated in to the built environment. This will be accomplished through policies and codes that support plans such as the Regional Plan, Master Plans, and Transportation Plans.

Goal 4: Increase efficiency of buildings

Strategy 1: Incorporate low impact elements into building design, construction, and operation.

Priority 1: Ensure new and renovated buildings meet established criteria for best practices such as LEED, or LEED equivalent, certification.
Priority 2: Require low or ultra-low NO_x water heaters on new and renovated buildings.

Priority 3: Require Energy Star products for new and renovated buildings.
Priority 4: Ensure new and renovated buildings are prepped for low impact technologies such as electric vehicle charging, rooftop solar panels, and rain gardens.

Goal 5: Expand air quality education and outreach programs

Strategy 1: Empower elected officials, appointed officials, board, committees, and the public to make good decisions that improve long-term air quality.

Priority 1: Encourage additional stakeholders to support Ozone Advance through adoption of resolutions, establishing Ozone Advance as a priority, and providing letters of support.
Priority 2: Provide information about air quality programs through the EPA Greg Cooke Visionary Award winning Keep it Clean program. Keep it Clean includes the Be Idle Free, nOzone, and Rack Em Up campaigns.
Priority 3: Deliver Keep it Clean program information via social media, presentations (planning commissions, governing boards, professional organizations, service groups, university students, etc.), newsletters (Nevada Planner, The Western Planner, etc.), tabling events, and traditional media. It will also be available via the AQMD website (OurCleanAir.com).

Strategy 2: Educate the public on how to use air quality information and make good decisions to reduce exposure when ozone concentrations reach harmful levels.

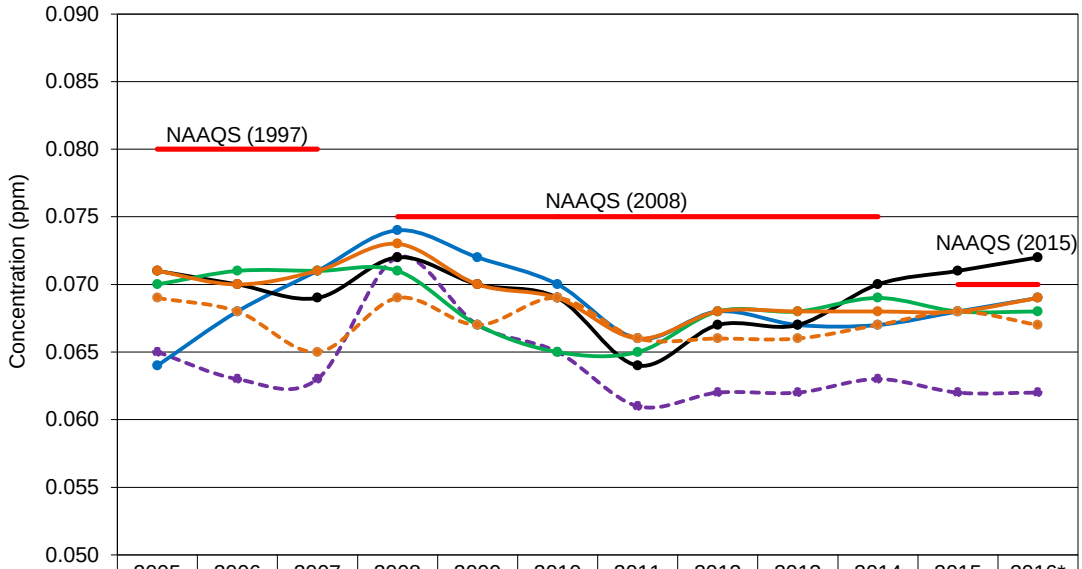
Priority 1: Provide information about Air Quality Index (AQI) levels and precautions the public can take to reduce exposure. This information will be delivered via social media, EnviroFlash, AirNow, and traditional media. It will also be available via the AQMD website (OurCleanAir.com) and air quality hotline [(775) 785-4110].

8.0 ANNUAL REPORTING

8.1 Air Monitoring Data

The goal of Ozone Advance is to reduce ozone precursor emissions and prevent violations of the ozone NAAQS. The ultimate Key Performance Indicator (KPI) for success is the ozone design value (DV). The design value is the statistic used to compare ambient air monitoring data against the NAAQS. Annual Ozone Advance updates will include a chart, similar to the one below, illustrating the ten year DV trend in comparison to the NAAQS.

Figure 8.1
Design Values vs. NAAQS
(2005-2016)



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016*
NAAQS	0.08	0.08	0.08	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.070	0.070
Incline	0.065	0.063	0.063	0.072	0.067	0.065	0.061	0.062	0.062	0.063	0.062	0.062
Lemmon Valley	0.064	0.068	0.071	0.074	0.072	0.070	0.066	0.068	0.067	0.067	0.068	0.069
Reno	0.071	0.070	0.069	0.072	0.070	0.069	0.064	0.067	0.067	0.070	0.071	0.072
South Reno	0.070	0.071	0.071	0.071	0.067	0.065	0.065	0.068	0.068	0.069	0.068	0.068
Spanish Springs	-	-	-	-	-	-	-	-	-	-	-	-
Sparks	0.071	0.070	0.071	0.073	0.070	0.069	0.066	0.068	0.068	0.068	0.068	0.069
Toll	0.069	0.068	0.065	0.069	0.067	0.069	0.066	0.066	0.066	0.067	0.068	0.067

* Preliminary

Also to be included in the annual report are tables listing each site's: 1) Current DV and previous three years 4th highest 8-hour concentration, 2) ten highest 8-hour concentrations for the previous year, and 3) 4th highest 8-hour concentration for the upcoming year to maintain or attain the NAAQS. Example tables are shown below.

Table 8.2
4th High 8-Hour Ozone Averages (2014-2016) and Design Values (ppm)

Year	Incline	Lemmon Valley	Reno3	South Reno	Spanish Springs	Sparks	Toll
2014	0.063	0.067	0.071	0.068	-	0.069	0.067
2015	0.062	0.072	0.073	0.070	-	0.070	0.069
2016*	0.063	0.069	0.073	0.068	-	0.069	0.065
DV**	0.062	0.069	0.072	0.068	-	0.069	0.067

* Preliminary
** Annual 4th highest daily maximum 8-hr concentration, averaged over 3 years
Note: Target design value is 0.070 ppm or less.

Table 8.3
8-Hour Ozone Averages (ppm)
(2016*)

Rank	Incline		Lemmon Valley		Reno3		South Reno		Spanish Springs		Sparks		Toll	
	Value	Date	Value	Date	Value	Date	Value	Date	Value	Date	Value	Date	Value	Date
1	0.064	08/10	0.071	08/15	0.073	07/02	0.070	08/15	-	-	0.071	08/15	0.066	07/25
2	0.064	08/28	0.071	08/28	0.073	07/03	0.070	08/28	-	-	0.070	08/28	0.066	08/15
3	0.063	07/25	0.070	07/04	0.073	07/04	0.069	07/13	-	-	0.069	07/03	0.065	07/03
4	0.063	08/27	0.069	07/02	0.073	08/15	0.068	07/25	-	-	0.069	07/25	0.065	07/13
5	0.062	08/05	0.068	07/25	0.071	07/13	0.067	07/31	-	-	0.068	07/04	0.065	07/26
6	0.062	08/07	0.067	07/03	0.071	07/25	0.067	08/03	-	-	0.068	08/07	0.065	08/28
7	0.061	06/23	0.067	08/05	0.070	08/28	0.067	08/27	-	-	0.067	07/13	0.064	06/06
8	0.061	07/03	0.067	08/27	0.069	06/06	0.066	07/03	-	-	0.067	08/03	0.064	07/31
9	0.061	07/31	0.065	06/23	0.068	07/05	0.065	06/06	-	-	0.067	08/27	0.064	08/05
10	0.061	08/14	0.065	07/01	0.068	07/29	0.065	07/02	-	-	0.066	06/06	0.064	08/27

* Preliminary
Note: Target goals are: 1) Less than four exceedances (> 0.070 ppm) per monitor per year, and 2) 4th 8-hour high for each monitor is less than 0.070 ppm.

Table 8.4
Maximum 2017 4th High 8-Hour Ozone Averages Required for Maintenance or Attainment

Year	Incline	Lemmon Valley	Reno3	South Reno	Spanish Springs	Sparks	Toll
2015	0.062	0.072	0.073	0.070	-	0.070	0.069
2016*	0.063	0.069	0.073	0.068	-	0.069	0.065
2017	0.087	0.071	0.066	0.074	-	0.073	0.078
DV**	0.070	0.070	0.070	0.070	-	0.070	0.070

* Preliminary
** Annual 4th highest daily maximum 8-hr concentration, averaged over 3 years

8.2 Additional Key Performance Indicators

Additional KPI's will be reported that track anthropogenic data and activities that affect ozone precursor emissions. Successful Ozone Advance initiatives will show long-term improvements in these activity KPI's. Example KPI's are:

1. Population
2. VMT (total and per capita)
3. Gasoline dispensed from gasoline dispensing facilities (GDF)
4. Gasoline transferred through the Sparks Tank Farm
5. Transportation Mode Splits
6. Vanpools (number and VMT reduced)
7. Public Transit (ridership, coverage, and frequency)
8. Clean School Busses (number and ratio of non-diesel)
9. Clean Waste Disposal Trucks (number and ratio of non-diesel)
10. Tree Canopy (percent coverage and number of new tree plantings in Reno)
11. Electric Vehicle charging stations (number and use)
12. Bikeways (miles by classification)
13. Bike Friendly Businesses (number of businesses and employees)
14. LEED, or LEED-Equivalent, Certified Buildings (number by levels)
15. Energy intensity of public buildings

8.3 Chronic Disease Key Performance Indicators

Reducing transportation-related emissions is a key goal of the Ozone Advance program. Improving the built environment to replace motor vehicle trips with active transportation options should also improve public health. The following public health KPI's will also be included in the annual reports.

1. Obesity rates among adolescents and adults
2. Diabetes rates
3. Chronic heart disease rates
4. Chronic Obstructive Pulmonary Disease (COPD) rates
5. Asthma rates

9.0 MILESTONE DATES

9.1 Upcoming Milestones and Deadlines

Implementation of the ozone NAAQS has specific scheduled requirements. Below are key dates related to attaining and/or maintaining the NAAQS.

2017
Approximately June 2: EPA issues 120-day letters for 2015 ozone NAAQS initial designations
October: EPA finalizes 2015 ozone NAAQS initial designations

2018
January: Path Forward update submittal to EPA

2019
January: Path Forward update submittal to EPA

2020
January: Path Forward update submittal to EPA
October: Statutory deadline for "Marginal" non-attainment areas to meet the NAAQS

2021
February 3: End of first five year commitment to participate in the Ozone Advance program

APPENDIX A

Ozone Advance Request to Participate Letter from WCHD

Acceptance Letter to Participate in Ozone Advance from EPA

WASHOE COUNTY
HEALTH DISTRICT
ENHANCING QUALITY OF LIFE

January 29, 2016

Ozone Advance
c/o Laura Bunte
U.S. Environmental Protection Agency
Office of Air Quality Planning and Standards, C304-01
Research Triangle Park, NC 27711

Subject: Participation in Ozone Advance

Dear Ms. Bunte:

The Washoe County Health District, Air Quality Management Division (AQMD) is requesting to participate in Ozone Advance program. We wish to join this partnership with EPA to preserve and improve the air quality in Washoe County, Nevada. We meet the following program eligibility criteria:

1. Washoe County is not currently a nonattainment area for either the 1997 8-hour nor the 2008 8-hour National Ambient Air Quality Standard (NAAQS) for ozone;
2. The following air monitors reflect the air quality in Washoe County:

AQS ID	Site Name
32-031-0016	Reno
32-031-0020	South Reno
32-031-0025	Toll Road
32-031-1005	Sparks
32-031-2002	Incline Village
32-031-2009	Lemmon Valley

3. Existing emissions inventory reporting requirements have been met.

We understand that our efforts under Ozone Advance may benefit Washoe County by potentially:

- Reducing air pollution in terms of ozone as well as other air pollutants,
- Ensuring continued healthy ozone levels,
- Maintaining the ozone NAAQS,
- Helping avoid exceedances and violations of the ozone NAAQS that could lead to a future nonattainment designation,
- Increasing public awareness about ground-level ozone as an air pollutant, and
- Targeting limited resources toward actions to address ozone problems quickly.

Our goal is to implement measures and programs to reduce ozone in Washoe County in the near term. We agree that it is in our best interest to work together and in coordination with stakeholders and the public to proactively pursue this goal.

Feel free to contact Ms. Charlene Albee (calbee@washoecounty.us; (775) 784-7211) or Mr. Daniel Inouye (dinouye@washoecounty.us; (775) 784-7214) of my staff if you need additional information.

Sincerely,

Kevin Dick
District Health Officer
Washoe County Health District

cc: John Kelly, EPA Region IX
Karina O'Connor, EPA Region IX

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

February 3, 2016

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

Kevin Dick
District Health Officer
Washoe County Health District, Air Quality Management Division
1001 East Ninth Street, P.O. Box 11130
Reno, NV 89520

Dear Mr. Dick,

Thank you for your letter indicating interest on the part of the Washoe County Health District, Air Quality Management Division in joining the Ozone Advance program with respect to Washoe County, Nevada. We have confirmed your eligibility to participate, and we welcome your involvement in this innovative program.

We appreciate your interest in improving air quality in Washoe County, and we look forward to assisting you as you identify, evaluate, select, and implement measures and programs tailored to your area that may reduce ozone levels and increase public awareness.

Your primary EPA point of contact will be Karina O'Connor, EPA Region 9; Karina can be reached at (775) 434-8176 or oconnor.karina@epa.gov. General questions about the program may be referred to Laura Bunte of my staff at (919) 541-0889 or advance@epa.gov. For resources to help you with your work to improve air quality, please refer to www.epa.gov/advance.

Sincerely,

Gregory A. Green
Director, Outreach and Information Division
Office of Air Quality Planning and Standards
U.S. Environmental Protection Agency

cc: Karina O'Connor, EPA Region 9
Laura Bunte, EPA OAQPS

APPENDIX B

Adopted Resolutions Supporting Ozone Advance

WASHOE COUNTY
HEALTH DISTRICT
ENHANCING QUALITY OF LIFE

WHEREAS, the Ozone Advance Program is a voluntary local approach to ozone attainment whose purpose is to encourage early emission reductions keeping Washoe County in attainment of the health-based National Ambient Air Quality Standard (NAAQS) for ozone; and

WHEREAS, an action plan under the Ozone Advance Program would achieve emission reductions by implementing voluntary measures tailored to Washoe County; and

WHEREAS, the Air Quality Management Division (AQMD) of the Washoe County Health District is responsible for ensuring the air we breathe meets the health-based NAAQS for all pollutants including ozone; and

WHEREAS, breathing harmful levels of ozone can trigger a variety of health problems including chest pain, coughing, throat irritation, and congestion; and

WHEREAS, children, the elderly, and those with existing respiratory illnesses are at greatest risk from exposure to ozone; and

WHEREAS, motor vehicles are the largest category of ozone precursor emissions; and

WHEREAS, measures to improve air quality benefit public health, the environment, and economic development; and

WHEREAS, clean air is essential to a healthy community; and

WHEREAS, a successful Ozone Advance Program will require a collaborative effort by all of the Health District's partners.

NOW, THEREFORE, BE IT RESOLVED,

The Washoe County District Board of Health commits to support the following measures as part of the AQMD's Ozone Advance Program:

Measure 1: Support Health District and Regional plans that reduce ozone levels including:
- Air Quality State Implementation Plans
- Community Health Improvement Plans
- Regional Transportation Plans

Measure 2: Encourage sustainable plans, policies, and codes throughout Washoe County that:
- Minimize motor vehicle trips and vehicle miles traveled
- Support active transportation such as walking and biking
- Support public transportation
- Minimize vehicle idling
- Reduce per capita energy usage
- Reduce per capita waste material taken to landfills
- Minimize water consumption and street runoff
- Increase the community's tree canopy

Measure 3: Implement sustainable practices in Health District operations including:
- Employee Trip Reduction programs
- Energy conservation and efficiency projects
- Limiting Health District vehicle idling to less than 3 minutes
- Keeping Health District vehicles maintained including properly inflated tires
- Increasing zero emissions and alternative fuel vehicles in the Health District fleet

This Resolution shall become effective upon adoption by the Washoe County District Board of Health.

ADOPTED this 25th day of February, 2016.

Kitty Jung, Chair
Washoe County District Board of Health

RESOLUTION NO. 3291

Introduced by Council
4/11/2016 AI 9.2

WASHOE COUNTY HEALTH DISTRICT
ENHANCING THE QUALITY OF LIFE

WHERE AS, the Ozone Advance Program is a voluntary local approach to ozone attainment whose purpose is to encourage early emission reductions keeping Washoe County in attainment of the health-based National Ambient Air Quality Standard (NAAQS) for ozone; and

WHERE AS, an action plan under the Ozone Advance Program would achieve emission reductions by implementing voluntary measures tailored to Washoe County; and

WHERE AS, the Air Quality Management Division (AQMD) of the Washoe County Health District is responsible for ensuring the air we breathe meets the health-based NAAQS for all pollutants including ozone; and

WHERE AS, breathing harmful levels of ozone can trigger a variety of health problems including chest pain, coughing, throat irritation, and congestion; and

WHERE AS, children, the elderly, and those with existing respiratory illnesses are at greatest risk from exposure to ozone; and

WHERE AS, motor vehicles are the largest category of ozone precursor emissions; and

WHERE AS, measures to improve air quality benefit public health, the environment, and economic development; and

WHERE AS, clean air is essential to a healthy community; and

WHERE AS, a successful Ozone Advance Program will require a collaborative effort by all of the Health District's partners.

NOW, THEREFORE, BE IT RESOLVED by the Sparks City Council that Geno R. Martini, Mayor of the City of Sparks, and all members of the Sparks City Council commits to support the following measures as part of the AQMD's Ozone Advance Program and direct staff to implement these measures as part of the Action Plan:

Measure 1: Support Health District and Regional plans that reduce ozone levels including:

- Air Quality State Implementation Plans
- Community Health Improvement Plans
- Regional Transportation Plans

Measure 2: Encourage sustainable plans, policies, and codes throughout the City of Sparks that:

- Minimize motor vehicle trips and vehicle miles traveled
- Support active transportation such as walking and biking
- Support public transportation
- Minimize vehicle idling
- Reduce per capita energy usage
- Reduce per capita waste material taken to landfills
- Minimize water consumption and street runoff
- Increase the community's tree canopy

Measure 3: Implement sustainable practices in City of Sparks operations including:

- Employee Trip Reduction programs
- Energy conservation and efficiency projects
- Limiting City of Sparks fleet vehicle idling to less than 3 minutes
- Keeping City of Sparks fleet vehicles maintained including properly inflated tires
- Increasing zero emissions and alternative fuel vehicles in the City of Sparks fleet

.

PASSED AND ADOPTED this 11th day of April, 2016, by the following vote of the City Council:

AYES: Ratti, Lawson, Smith, Bybee

NAYS: None

ABSENT: Schmitt

ABSTAIN: None

Approved this 11th day of April, 2016, by:

Geno R. Martini, Mayor

Approved as to form:

Chet Adams, City Attorney

Attest:

Teresa Gardner, City Clerk

RESOLUTION

WHEREAS, the Ozone Advance Program is a voluntary local approach to ozone attainment whose purpose is to encourage early emission reductions keeping Washoe County in attainment of the health-based National Ambient Air Quality Standard (NAAQS) for ozone; and

WHEREAS, an action plan under the Ozone Advance Program would achieve emission reductions by implementing voluntary measures tailored to Washoe County; and

WHEREAS, the Air Quality Management Division (AQMD) of the Washoe County Health District is responsible for ensuring the air we breathe meets the health-based NAAQS for all pollutants including ozone; and

WHEREAS, breathing harmful levels of ozone can trigger a variety of health problems including chest pain, coughing, throat irritation, and congestion; and

WHEREAS, children, the elderly, and those with existing respiratory illnesses are at greatest risk from exposure to ozone; and

WHEREAS, motor vehicles are the largest category of ozone precursor emissions; and

WHEREAS, measures to improve air quality benefit public health, the environment, and economic development; and

WHEREAS, clean air is essential to a healthy community; and

WHEREAS, a successful Ozone Advance Program will require a collaborative effort by all of the Health District's partners.

NOW, THEREFORE, BE IT RESOLVED,

The Washoe County Board of Commissioners commits to support the following measures as part of the AQMD's Ozone Advance Program:

Measure 1: Support Health District and Regional plans that reduce ozone levels including:
- Air Quality State Implementation Plans
- Community Health Improvement Plans
- Regional Transportation Plans

Measure 2: Encourage sustainable plans, policies, and codes throughout Washoe County that:
- Minimize motor vehicle trips and vehicle miles traveled
- Support active transportation such as walking and biking
- Support public transportation
- Minimize vehicle idling
- Reduce per capita energy usage
- Reduce per capita waste material taken to landfills
- Minimize water consumption and street runoff
- Increase the community's tree canopy

Measure 3: Implement sustainable practices in Health District operations including:
- Employee Trip Reduction programs
- Energy conservation and efficiency projects
- Limiting Health District vehicle idling to less than 3 minutes
- Keeping Health District vehicles maintained including properly inflated tires
- Increasing zero emissions and alternative fuel vehicles in the Health District fleet

This Resolution shall become effective upon adoption by the Washoe County Board of Commissioners.

ADOPTED this 12th day of April, 2016.

Kitty K. Jung, Chair

ATTEST:

Washoe County Clerk

RESOLUTION NO. 8189

RESOLUTION OF THE RENO CITY COUNCIL TO JOIN THE OZONE ADVANCE PROGRAM PARTNERSHIP AND IMPLEMENT VOLUNTARY STRATEGIES TO REDUCE OZONE EMISSIONS, AND OTHER MATTERS PROPERLY RELATING THERETO.

A. **WHEREAS**, the Ozone Advance Program is a voluntary local approach to ozone attainment whose purpose is to encourage early emission reductions keeping Washoe County in attainment of the health-based National Ambient Air Quality Standard (NAAQS) for ozone; and

B. **WHEREAS**, an action plan under the Ozone Advance Program would achieve emission reductions by implementing voluntary measures tailored to Washoe County; and

C. **WHEREAS**, the Air Quality Management Division (AQMD) of the Washoe County Health District is responsible for ensuring the air we breathe meets the health-based NAAQS for all pollutants including ozone; and

D. **WHEREAS**, breathing harmful levels of ozone can trigger a variety of health problems including chest pain, coughing, throat irritation, and congestion; and

E. **WHEREAS**, children, the elderly, and those with existing respiratory illnesses are at greatest risk from exposure to ozone; and

F. **WHEREAS**, motor vehicles are the largest category of ozone precursor emissions; and

G. **WHEREAS**, measures to improve air quality also benefit public health, the environment, and economic development; and

H. **WHEREAS**, clean air is essential to a healthy community; and

I. **WHEREAS**, a successful Ozone Advance Program will require a collaborative effort by regional partners, including: the Washoe County Health District, Washoe County, City of Reno, City of Sparks, Regional Transportation Commission of Washoe County, Nevada Division of Environmental Protection, Nevada Department of Transportation, Truckee Meadows Regional Planning Agency, Reno-Tahoe Airport Authority, Associated General Contractors, Builders Association of Northern Nevada, and Reno-Sparks Chamber of Commerce.

NOW THEREFORE be it hereby resolved by the City of Reno Council as follows:

Section 1. The City Council hereby finds that the foregoing recitals are true and correct and are incorporated by reference.

Section 2. The City of Reno commits to implement the following measures as part of the AQMD's Ozone Advance Program and direct staff to implement these measures as part of the City's Sustainability and Climate Action Plan:

A. Support the Washoe County Health District's and regional plans that reduce ozone levels, including:

   1. Air Quality State Implementation Plans

   2. Community Health Improvement Plans

   3. Regional Transportation Plans

B. Integrate into the City of Reno's Sustainability and Climate Action plan strategies, policies, and codes that reduce ozone emissions, including but not limited to:

1. Demonstrate the City of Reno's leadership in reducing operations-related emissions, including: voluntary Employee Trip Reduction program; Green Fleets program that addresses vehicle maintenance standards, proper tire inflation policy, anti-idling policy and program, and transition to zero emission and alternative fuel vehicles; and, energy efficiency and renewable energy in City facilities.

2. Reduce transportation sector related emissions, including: minimize motor vehicle trips and vehicle miles traveled; support active transportation such as walking and biking; support public transportation; require clean diesel vehicles and equipment on public works projects; and, minimize heavy duty diesel idling.

3. Reduce per capita energy usage and increase energy efficiency and renewable energy in the commercial and residential building sectors.

4. Expand sustainable building and business practices, including: waste reduction and recycling to reduce per capita waste material taken to landfills; water conservation; low impact development and reduction of stormwater runoff; and, increase the urban tree canopy throughout the city.

Section 3. The Mayor, City Manager, members, officers, employees and agents of the City are hereby authorized and directed, jointly and severally, to do any and all things and to execute, deliver and record all documents as may be required and otherwise to give effect to, carry out and comply with the terms and intent of this Resolution, and to take all necessary and appropriate actions to effectuate the intent of this Resolution.

Section 4. This resolution shall take effect immediately upon its passage.

Upon motion by Council Member Delgado, seconded by Council Member Bobzien, the foregoing resolution was adopted this 13th day of April, 2016, by the following vote of the Council:

AYES:	Delgado, Bobzien, Brekhus, Duerr, Jardon, Schieve		
NAYS:	None		
ABSTAIN:	None	ABSENT:	McKenzie

APPROVED this 13th day of April, 2016.

HILLARY L. SCHIEVE
MAYOR

ATTEST:

ASHLEY D. TURNEY
CITY CLERK

CITY OF RENO CORPORATE SEAL WASHOE COUNTY, NEVADA

RESOLUTION

RESOLUTION TO JOIN THE OZONE ADVANCE PROGRAM PARTNERSHIP AND IMPLEMENT VOLUNTARY STRATEGIES TO REDUCE OZONE EMISSIONS IN WASHOE COUNTY.

WHEREAS, the Ozone Advance Program is a voluntary local approach to ozone attainment whose purpose is to encourage early emission reductions keeping Washoe County in attainment of the health-based National Ambient Air Quality Standard (NAAQS) for ozone; and

WHEREAS, an action plan under the Ozone Advance Program would achieve emission reductions by implementing voluntary measures tailored to Washoe County; and

WHEREAS, the Air Quality Management Division (AQMD) of the Washoe County Health District is responsible for ensuring the air we breathe meets the health-based NAAQS for all pollutants including ozone; and

WHEREAS, breathing harmful levels of ozone can trigger a variety of health problems including chest pain, coughing, throat irritation, and congestion; and

WHEREAS, children, the elderly, and those with existing respiratory illnesses are at greatest risk from exposure to ozone; and

WHEREAS, motor vehicles are the largest category of ozone precursor emissions; and

WHEREAS, measures to improve air quality also benefit public health, the environment, and economic development; and

WHEREAS, clean air is essential to a healthy community; and

WHEREAS, a successful Ozone Advance Program will require a collaborative effort by all of the RTC's partners.

NOW, THEREFORE, BE IT RESOLVED BY THE REGIONAL TRANSPORTATION COMMISSION OF WASHOE COUNTY that the Regional Transportation Commission of Washoe County commits to implement the following measures as part of the AQMD's Ozone Advance Program and direct staff to implement these measures as part of the Action Plan.

Measure 1: Support Health District and regional plans that reduce ozone levels including:

- Air Quality State Implementation Plans
- Regional Transportation Plans
- Community Health Improvement Plans

Measure 2: Encourage sustainable plans, policies, and codes through local, state, and federal jurisdictions that:

- Minimize motor vehicle trips and vehicle miles traveled
- Support active transportation such as walking and biking
- Support public transportation
- Minimize heavy duty diesel idling
- Minimize water consumption and street runoff
- Reduce per capita energy usage
- Increase clean diesel vehicles and equipment on public works projects
- Increase the community's tree canopy

Measure 3: Implement sustainable practices in RTC operations including:

- Implement the RTC Complete Streets Program
- Employee Trip Reduction programs
- Energy conservation and efficiency projects
- Limiting RTC maintenance vehicle idling to less than 3 minutes
- Keeping RTC vehicles maintained and tires properly inflated
- Increasing zero emission and alternative fuel vehicles in the RTC fleet

CERTIFICATE

The undersigned, duly qualified Chairperson of the Regional Transportation Commission, certifies that the foregoing is a true and correct copy of a resolution adopted at a legally convened meeting held on June 17, 2016.

Neoma Jardon, Chair
Regional Transportation Commission

STATE OF NEVADA)
§
COUNTY OF WASHOE)

This instrument was acknowledged before me on June 17, 2016, by Ronald E Smith via, Chair of the Regional Transportation Commission.

DENISE THOMPSON
Notary Public-State of Nevada
APPT. NO. 08-8382-2
My App. Expires October 17, 2016

Notary Public

TMRPA
TRUCKEE MEADOWS REGIONAL PLANNING AGENCY

REGIONAL PLANNING GOVERNING BOARD

Vaughn Hartung, Chair • Charlene Bybee, Vice-Chair • Marsha Berkbigler • David Bobzien • Jenny Brekhus • Naomi Duerr • Jeanne Herman • Ed Lawson • Geno Martini • Paul McKenzie • Kimberly H. Robinson, Executive Director • LIAISON - Veronica Frenkel, WCSD Board of Trustees

RESOLUTION NO. 16-05 (RPGB)

SUPPORTING THE VOLUNTARILY INVOLVEMENT IN THE OZONE ADVANCE PROGRAM

WHEREAS, the Ozone Advance Program is a voluntary local approach to ozone attainment whose purpose is to encourage early emission reductions keeping Washoe County in attainment of the health-based National Ambient Air Quality Standard (NAAQS) for ozone; and

WHEREAS, an action plan under the Ozone Advance Program would achieve emission reductions by implementing voluntary measures tailored to Washoe County; and

WHEREAS, the Air Quality Management Division (AQMD) of the Washoe County Health District is responsible for ensuring the air we breathe meets the health-based NAAQS for all pollutants including ozone; and

WHEREAS, breathing harmful levels of ozone can trigger a variety of health problems including chest pain, coughing, throat irritation, and congestion; and

WHEREAS, children, the elderly, and those with existing respiratory illnesses are at greatest risk from exposure to ozone; and

WHEREAS, motor vehicles are the largest category of ozone precursor emissions; and

WHEREAS, measures to improve air quality also benefit public health, the environment, and economic development; and

WHEREAS, clean air is essential to a healthy community; and

WHEREAS, the Regional Plan supports the effective management of our natural resources, recognizing their importance to the public health, safety, and welfare of our community; and

WHEREAS, a successful Ozone Advance Program will require a collaborative effort by all of the TMRPA's partners.

NOW, THEREFORE, BE IT RESOLVED THAT the Regional Planning Governing Board does hereby commit to implementing the following measures as part of the AQMD's Ozone Advance Program and direct staff to implement these measures in support of the AQMD's Action Plan:

Measure 1: Support Health District and regional plans that reduce ozone levels including:
- Air Quality State Implementation Plans
- Regional Transportation Plans
- Community Health Improvement Plans
- Truckee Meadows Regional Plan

Measure 2: Encourage sustainable plans, policies, and codes through local, state, tribal, and federal jurisdictions that:
- Minimize motor vehicle trips and vehicle miles traveled
- Support active transportation such as walking and biking
- Support public transportation
- Minimize water consumption and street runoff
- Reduce per capita energy usage
- Reduce per capita waste material taken to landfills
- Increase the community's tree canopy
- Support land use patterns that maximize efficient infrastructure investment in our community
- Encourage land uses that promote responsible management of the region's air quality resources

Measure 3: Implement sustainable practices in TMRPA's operations including:
- Employee Trip Reduction programs
- Energy conservation and efficiency projects

Adopted this day, June 9, 2016, by an affirmative vote of the Regional Planning Governing Board:

Ayes: 9/10; Nayes: 0; Abstain:_____.

Approved by:

Vaughn Hartung, Chair
Regional Planning Governing Board

Attest:

Kimberly H. Robinson,
Executive Director of Regional Planning