



# UTAH VALLEY CLEAN AIR TASK FORCE REPORT FOR 2014-15

THIS UPDATE 2 JANUARY 2016



## **Utah Valley Clean Air Task Force meeting 23 November 2015**

Clockwise, from left: Ned Hill (BYU), Mayor John Curtis (Provo), Ralph Clegg (Director, Utah County Health Dept.), John Pilmer (PilmerPR), Steve Klass (P3, an environmental business group), Peter Christensen (Utah County Association of Realtors), Ryan Clark (Orem City), Steve Alder (Utah County Health Department), Stan Klemetson (UVU), David Georgeson (McWayne Ductile), Jamie Riccobono (American Lung Association), Marla Branum (Utah County Health Department), Meghan Dutton (Utah Clean Energy), Rona Rahlph (President, Utah Valley Chamber of Commerce). Not in photo: Andrew Jackson (Executive Director, Mountainland Association of Governments), Greg Graves (Utah County Commissioner), Don Jarvis (UVCATF Secretary), and Hugh Johnson (UTA).

## UTAH VALLEY CLEAN AIR TASK FORCE REPORT 2014-15

**HISTORY:** To counteract Utah County's severe short-term air pollution, the Utah Valley Clean Air Task Force was established in early 2014. It resulted from the 'Utah Valley Business Clean Air Summit' hosted on 10 December 2013 by Intermountain Health Care and organized by Utah Valley Chamber of Commerce President Val Hale, Utah County Health Department Director Joseph Miner, and Provo Sustainability Adviser Don Jarvis. Roughly fifty Utah County leaders in business, health care, and business attended and agreed to establish a task force to accomplish the goals of the Summit. In January of 2014, Val Hale convened the Task Force and chaired it until his appointment as Director of the Utah Governor's Office of Economic Development in July of 2014. After Rona Rahlf was selected as Chamber President soon thereafter, she asked Don Jarvis to continue as secretary and conduct its meetings. Following is a non-chronological report of our work in 2014 and 2015.

### 1) **CLEAN AIR PUBLICITY:**

- a) **CLEAN-AIR PLEDGE PROGRAM:** In 2014 we adopted a citizen's clear-air pledge program for all of Utah County, then at John Pilmer's initiative recommended it in a 2015 letter to all mayors of Mountainland Association of Governments (see appendix 1), and advertised it on public and social media.
- b) **ELECTRONIC BILBOARD ADS:** Utah County Public Relations specialist Michael Stansfield persuaded YESCO and Reagan Outdoor Advertising to carry gratis public-service ads rotating through the six actions listed below to help clean the air.



This striking graphic was designed by Intermountain Healthcare's Seth Hawkins. John Pilmer maintains it and other clean air news on Facebook #uvcleanair.

- c) PLEDGE CARDS: With financial help from MAG Executive Director Andrew Jackson, we printed and distributed hundreds of business-card size pledge cards as shown below.



To publicize the pledge, Utah County Association of Realtors' Director Taylor Oldroyd and Provo City Mayor John Curtis in early 2015 conducted a selfie contest for residents taking the pledge while holding a pledge card. The realtors donated a flat-screen TV to the randomly selected winner.

- d) AIR-QUALITY FLAG SETS: To help residents understand each day's air quality, in 2014 Utah County Health Department's Andrea Jensen used \$19,000 of state funds allocated by MAG to purchase EPA-approved five-color flag sets to signal air quality at every school in Utah County. Andrea distributed these flag sets and educational materials on air quality to every participating school in Utah County and to several public buildings. Her successor Marla Brannum is working with administrators to use them effectively.



- e) UTA BUS IDLING: We encouraged Hugh Johnson to remind UTA bus drivers about its strict policy limiting idling to one minute when the outdoor temperature is between 32° and 90° Fahrenheit. UTA did so and installed large thermometers where drivers can see them while parked at its intermodal hubs.

## 2) STATE LEGISLATION:

- a) TIER 3 GAS SUPPORT: This cleaner gasoline will dramatically reduce air pollution, so in 2014 we drafted a resolution to the Legislature supporting incentives to produce Tier 3

gasoline. We encouraged similar action by Provo City, other cities in Mountainland Association of Governments, and the Utah Valley Chamber of Commerce (see Appendix 2 for Provo's version). In March of 2015, our Utah County legislators helped pass SB 216 supporting production of Tier 3 gasoline.

- b) **BUILDING CODE UPDATE:** Buildings produce about 40% of our air pollution and will be the *major* source of air pollution in 2040. To replace our outdated state building code, in 2015 we drafted a resolution to the Legislature supporting a strong update, which will not only help air quality but provide new owners significant savings in the long run. A version was passed by Provo City (see appendix 3) and at Ryan Clark's initiative a similar one is being considered by Orem City. The Chamber of Commerce will list a building code update as a legislative priority, and we are encouraging other MAG cities to do this as well.
  
- 3) **COUNTY LEGISLATION:** In 2015 Steve Alder helped draft, pass, and publicize an anti-idling ordinance limiting vehicle idling to 2 minutes on public property in Utah County.
  
- 4) **ELECTRIC VEHICLE RECHARGING STATIONS:** Because electric vehicles emit no pollution and are becoming more popular, John Pilmer publicized Leaders for Clean Air's program to donate e-vehicle charging equipment gratis to any organization willing to install it (see <http://leadersforcleanair.org/>). As a result, Mountainland Association of Governments and Provo City are installing such stations by their main offices in Orem and Provo.
  
- 5) **SMOKING VEHICLE REPORTS:** Because pollution from one smoking vehicle can equal that of 100 normal cars, we worked with Utah County Health Department's Steve Alder to make reporting smoking vehicles easier via phone 801-851-7600 and its website <http://www.utahcountyonline.org/dept/healthenvirair/smokingvehicle/index.asp>
  
- 6) **CITY POLICIES:** Because the winter inversion season requires measures more severe than could be sustained during the rest of the year, we advocated and shared city and business policies to reduce pollution during emergency periods. Under Mayor Curtis's leadership, Provo City adopted a comprehensive policy involving communications to all city residents and actions that employees should take during the periods of severe air-quality problems (see Appendix 4).
  
- 7) **REPLACING FIREPLACES:** Because solid fuel burning produces more pollution than hundreds of homes burning only natural gas, we publicized thatUCAIR Associate Director Gwen Springmeyer ([gwen@ucair.org](mailto:gwen@ucair.org)) has some limited funding for replacing wood-burning stoves & fireplaces via the Realtor Wood Stove Exchange Program.

- 8) **COLLABORATION:** Believing that networking can increase our understanding and effectiveness, we collaborated and shared information on air quality with the American Lung Association, Envision Utah, Leaders for Clean Air, Orem City, P3 Utah (businesses interested in the environment), Provo City, SLC Chamber of Commerce, TravelWise, Utah Clean Air Partners (UCAIR), and Utah Clean Energy.

AIR QUALITY IS A REGIONAL ISSUE: CITIES AND BUSINESSES ARE CORDIALLY INVITED TO SEND A REPRESENTATIVE TO MONTHLY MEETINGS OF THE UTAH VALLEY CLEAN AIR TASK FORCE. CONTACT DON JARVIS, email [jarvisdk@gmail.com](mailto:jarvisdk@gmail.com) mobile phone 801-318-6274.

## APPENDIX 1

Letter to all Council of Governments mayors in Mountainland Association of Governments



[DATE]

RE: Actions for cleaner air

Dear Mayor,

As you know, at this time of year many of our residents are gravely concerned about air quality but unsure about what they could do to improve it. Below is a pledge with five simple actions that would improve air quality for our families and community:

### **I will seek opportunities to...**

- **Consolidate vehicle trips and reduce my family's total driving.**
- **Park and walk in rather than using drive-up windows.**
- **Not let my vehicle idle for more than 30 seconds, even on cold mornings.**
- **Walk, ride a bike, car-pool, or use public transportation.**
- **Keep my sidewalks clear.**

Notice that this pledge is not about *always* or *never* doing these things, but simply about looking for opportunities to do them. It was created by the Chamber's Utah Valley Clean Air Task Force.

We hope that you will join us in this pledge, publicizing it, and recommending that members of our communities also take it. For more ideas see Facebook#uvcleanair and <http://www.ucair.org/>

Together we can do more than just talk about the weather.

Sincerely yours,

Rona Rahlf, President, Utah Valley Chamber of Commerce

John Curtis, Provo Mayor

Larry Ellertson, Utah County Commissioner

Greg Graves, Utah County Commissioner

Ralph Clegg, Director, Utah County Health Department

Andrew Jackson, Executive Director, Mountainland Association of Governmen

Jamie Riccobono, Executive Director, American Lung Association, Utah

## APPENDIX 2

### Resolution on Tier 3 Gasoline

RESOLUTION 2014-50 (Passed 2 September 2014).

A JOINT RESOLUTION OF THE PROVO CITY MAYOR AND MUNICIPAL COUNCIL OUTLINING THEIR SUPPORT FOR THOROUGH RESEARCH OF TIER 3 GASOLINE AND EXPLORATION OF OTHER POSSIBLE AIR QUALITY ENHANCEMENTS FOR UTAH. (14-071)

WHEREAS, air pollution gravely threatens the health of the people of Utah County as well as economic development; and

WHEREAS, vehicles cause sixty per cent of the air pollution in Utah County, a larger fraction than is the case in some other Wasatch Front counties; and

WHEREAS, it has been asserted that Tier 3 fuel use is widely recognized by experts as the most cost-effective means to reduce pollution from vehicles and will reduce vehicle pollution up to eighty percent; and

WHEREAS, Utah County is among the seven counties of the Wasatch Front that have been designated as the one area in the United States that would benefit most from widespread use of Tier 3 gasoline; and

WHEREAS, the Environmental Protection Agency has estimated the additional cost of Tier 3 gasoline to be less than one penny per gallon; and

WHEREAS, the EPA further estimates that by 2030, the health savings as a result of the adoption of Tier 3 gasoline to be between \$6.7 and \$19 billion; and

WHEREAS, the EPA estimates that by 2030, the Tier 3 gasoline standards will annually prevent nationwide:

- Between 770 and 2,000 premature deaths
- 2,200 hospital admissions and asthma-related emergency room visits
- 19,000 asthma exacerbations
- 30,000 upper and lower respiratory symptoms in children
- 1.4 million lost school days, work days, and minor-restricted activities

WHEREAS, Provo City policies, including the master plan and the general plan, retroactively and proactively give specific attention to the achievement of clean air; and

NOW, THEREFORE, be it resolved that we, the members of the Provo City Municipal Council and jointly with the Mayor of Provo City are interested in state legislators performing necessary exploration and investigation of these assertions of the health benefits and estimated costs made by the EPA, and if found to be accurate, support Utah legislators in devising any and all measures that will effect the sale and promotion of Tier 3 gasoline in Utah and especially along the Wasatch Front as soon as possible.

BE IT FURTHER RESOLVED, that the Clerk of Provo City transmit duly authenticated copies of this resolution to the President of the Utah Senate, to the Speaker of the Utah House of Representatives, to the Clerk of the Legislature, and to the news media of Utah.

END OF RESOLUTION.

### APPENDIX 3

## Resolution on Upgrading the Utah Building Code

RESOLUTION 2015-67 (Passed 3 December 2015)

A JOINT RESOLUTION OF THE PROVO CITY MAYOR AND MUNICIPAL COUNCIL OUTLINING THEIR SUPPORT FOR ADOPTION OF THE 2015 INTERNATIONAL ENERGY CONSERVATION CODE (IECC) AND OTHER POSSIBLE AIR QUALITY ENHANCEMENTS FOR UTAH. (15-146)

WHEREAS, the Utah Governor's Office of Energy Development reports that adoption of the 2015 International Energy Conservation Code (IECC) would save each new Utah homeowner \$297 per year; and

WHEREAS, analysis conducted by the Pacific Northwest National Laboratory finds that the 2015 IECC is cost-effective for new commercial buildings and homes, resulting in positive cash flow within two years for new home buyers; and

WHEREAS, air pollution gravely threatens the health of the people of Utah County as well as economic development; and

WHEREAS, homes and buildings now account for 39% of air pollution in Utah according to the Utah Division of Air Quality; and

WHEREAS, energy-efficient new homes and commercial buildings represent an important long-term air pollution reduction strategy by reducing energy consumption and resulting pollution emissions over the 100+ year life of building structures; and

WHEREAS, adoption of the 2015 IECC would reduce CO<sub>2</sub> pollution in Utah by an estimated 5.06 million metric tons by 2040, the equivalent of taking over 84,000 cars off of the road every year; and

WHEREAS, adoption of the 2015 IECC would reduce by 1,502 tons Utah's emissions of direct pollution and precursors of PM<sub>2.5</sub> and ozone, both grave health threats, by 2050; and

WHEREAS, improved energy efficiency will also buffer against spikes in utility rates by reducing demand for energy by 7.57 trillion BTU, consequently mitigating the need for utility companies to build new energy infrastructure and pass those costs on to consumers; and

WHEREAS, it is far more cost-effective to build-in energy efficient, air pollution reduction technologies during construction, rather than retrofitting a home after it is constructed; and

WHEREAS, after considering the facts presented to the Municipal Council, the Council finds that (i) Provo City should adopt a resolution stating its interest in state legislators adopting the 2015 IECC for Utah, and (ii) such action reasonably furthers the health, safety and general welfare of the citizens of Provo City.

NOW, THEREFORE, be it resolved that we, the members of the Provo City Municipal Council and jointly with the Mayor of Provo City are interested in state legislators adopting the 2015 IECC for Utah with appropriate consideration for Utah's needs.

BE IT FURTHER RESOLVED, that the Clerk of Provo City transmit duly authenticated copies of this resolution to the President of the Utah Senate, to the Speaker of the Utah House of Representatives, to the Clerk of the Legislature, and to the news media of Utah.

END OF RESOLUTION.

## APPENDIX 4

### Provo City Policies for Periods of Severe Air Pollution



Administrative Directive 2014-02

Effective November 1, 2014

**CLEAN AIR GOALS AND STANDARDS** The purpose of this administrative directive is to provide guidance for Provo City departments and their employees as they continually work to improve air quality. The standards set forth herein will provide official direction in the development of staff work plans, department programs, budget recommendations and other implementation strategies. Because Air Quality has a direct effect on health, as well as the perception of Provo as a key city in the Intermountain West, Provo City employees shall observe the standards set forth below to help improve Provo's air quality, as well as improve the response to "Red-Air Days" as identified by the Utah Department of Environmental Quality (UDEQ). Provo City's vision and goal is to improve air quality to meet or exceed all national and state standards for PM<sub>2.5</sub>, PM<sub>10</sub>, ozone and carbon dioxide. The achievement of this clean air vision and goal will improve the health of Provo residents, aid in the retention and expansion of businesses, increase tourism, and reduce dependence on fossil fuels. (See: Goal 4.4, Provo Vision 2030.)

1. Definitions. For the purposes of this administrative directive the following terms shall have the following meanings:

(a) "Cold Starts" means starting a cold engine, which produces far more pollution than starting or running a warm engine. Many cold starts can be avoided by combining several small trips into a single trip. Reducing cold starts can play a significant role in reducing air pollution.

(b) "Ozone" means Ozone (O<sub>3</sub>) which is formed in the sunshine of hot summer days from nitrous oxides (NO<sub>x</sub>) and volatile organic compounds (VOCs). Ozone in the upper atmosphere protects us from harmful radiation but at ground level is dangerous to the lungs, even at low concentrations.

(c) "NO<sub>x</sub>" means the abbreviation for various oxides of nitrogen. These are formed when fossil fuels, including natural gas, are burned, and they combine with VOCs to form lung-damaging ozone in the summer and PM<sub>2.5</sub> in the winter. Home heating and vehicle use produce huge quantities of NO<sub>x</sub>, which contribute to damaging pollution from PM 2.5 and ozone.

(d) "PM<sub>2.5</sub>" means tiny air-borne particles and droplets measuring only 2.5 micrometers or less (1/7 the diameter of human hair) that are proven to be harmful to overall health. PM is an abbreviation for "particulate matter" and is one of the main components of smog during December and January inversions. Some PM<sub>2.5</sub> is emitted directly from vehicles and other sources, but much more is formed in the atmosphere

from the reaction of various chemicals such as nitrous oxides (NOx) and volatile organic compounds (VOCs).

(e) “PM10” means slightly larger particulates, measuring 10 micrometers in diameter or less. Vigorous regulation has greatly reduced PM10 pollution to the point that it is seldom at harmful levels in Utah County.

(f) “Red-Air Days” means days when the air is sufficiently polluted to be rated with the color red on the EPA’s Air Quality Index, which runs from 0-500. Red indicates a pollution level of 151-200 for five major pollutants: ground-level ozone, particulate matter, carbon monoxide, sulfur dioxide, and nitrogen dioxide.

(g) “Vehicle Miles Traveled” means the total miles traveled by all the vehicles in a fleet. This is significant because vehicles cause most of the air pollution in Utah County. Reducing vehicle miles traveled improves air quality.

(h) “VOC” means “Volatile Organic Compounds.” These compounds are omitted by thousands of substances, including gasoline, paints, cleaning supplies and many natural sources. VOCs combine with NOx to form ozone in the summer and PM2.5 in winter.

2. City-Wide Efforts. Provo City’s departments should lead by example. Departments should make efforts to reduce and mitigate air pollution emissions and assist others in reducing and mitigating their emissions, including:

(a) Vehicle Miles Traveled (VMT): To reduce VMT, the City will encourage its customers to use telephone, internet, or other methods to make payments and register for Provo City services so participants do not have to travel long distances. The City will also support work-from-home programs where feasible and encourage the use of technology such as video conferencing and remote computing for meetings and communication.

(b) Cooperation: The City Administration will encourage the vetting of new ideas and suggestions that will improve air quality including cooperating with others in the formation of stakeholder groups, adoption of new regulations and policies, and the use of new and improved technology.

(c) Innovation: Departments should seek to be innovative and to consider adoption of successful air quality improvement strategies in effect elsewhere, including municipal practices, public information campaigns, incentives and price mechanisms, and regulations as compatible with the overall goals of Provo City.

(d) Contracts: Workers and contractors providing services for the City will be encouraged to employ air quality best practices where possible for the work being performed, and conformance with air quality best practices will be considered an acceptable criterion in the procurement of products and services.

3. Infrastructure Improvement Standards. To promote clean air:

(a) Fleet: City departments will endeavor to procure vehicles with lower emissions. In particular, departments should consider the use of CNG (Compressed

Natural Gas) and other clean burning fuels and electric power. Other alternative fuels which will help to improve air quality will be considered as they become viable.

(b) **Equipment:** Departments will regularly audit and upgrade essential vehicles, equipment and tools as per existing policy #039.

(c) **Bikes:** The City Administration will encourage the adoption and implementation of the Provo City Bicycle Master Plan, to assist in the creation of a more efficient bike infrastructure that includes dedicated paths, signage, racks, corrals, etc. The City Administration will also support regional plans for barrier free, commuter bikeways.

(d) **Information Distribution:** At least one employee per department will be designated as responsible for air quality initiatives, regulations, training, correspondence, policies, and the dissemination of air quality information. This employee will coordinate the long-term clean air initiatives of Provo City and receive email alerts from the Utah Department of Environmental Quality (UDEQ) and share key information with employees in that department. This employee will also insure that the Provo City Idling Reduction Policy (09-02) will be a part of regular City-wide training.

4. **Red-Air Days Response.** To reduce pollution during Red-Air Days:

(a) **Trip Reduction:** Each department will have a trip reduction plan that eliminates 10-20% of vehicle trips during the inversion season. This policy does not apply to departments and divisions providing emergency response.

(b) **Flex Scheduling:** With a pre-approved work plan and authorization from supervisors, City employees may work from home before and during red air days, or count a certain amount of travel time toward work hours if using public transit as authorized by the Mayor.

(c) **Refueling:** Employees will avoid refueling vehicles before and during “Red-Air Days” in order to reduce VOCs diffusing into the air. If refueling is needed, refueling will be done in the afternoon or evening hours when sunlight is not as strong.

(d) **Carpool and Transit:** Employees will receive at their workplace carpool information and Utah Transit Authority (UTA) schedules.

(e) **Alternative Forms of Transportation:** City departments will encourage alternative forms of transportation during the inversion season.

5. **Incentives to Encourage Participation.** To encourage participation in conservation and the use of mass transit the City Administration will:

(a) **Transit Passes:** Make available for reduced purchase or award a certain number of UTA passes each year to employees.

(b) **Corporate Partnerships:** Continue to work with UTA to develop a City-wide transit pass program that meets the needs of local businesses and residents.

(c) **“Switch-It” Program:** Consider expanding the Provo City ‘Switch It’ program to include other pollution emitting appliances and small gasoline engines.

6. Education & Outreach. To inform the public and to reach out to community partners Provo City will:

(a) Public Notification: Use various media outlets to inform and educate its citizens on air quality best practices, in particular regarding times preceding and during red-air quality days. This includes development of an early warning system using emails, blogs, mobile apps, signs on major roadways, door hangers, mailers, etc.

(b) Anti-Idling: Continue its participation and partnership with the Provo School District and local businesses in the 'Idle Free' campaign.

(c) Classroom Instruction: Develop a model similar to the Energy Department's "Safe Kids" program to instruct in classrooms on the importance of air quality. Education and training could also be offered through the Provo Recreation Center. Examples of such programs include demonstrations and displays within the facility and merit badge training with Boy Scouts of America.

(d) Partnerships: Work to leverage partnerships with the area's universities and businesses to implement innovative air-quality-improvement technologies in city services and operations.

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Mayor

Attest:

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City Recorder