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# 1. INTRODUCTION

## BACKGROUND

The Arizona Department of Transportation (ADOT) initiated a pilot study for Sustaining Clean Air in the Central Yavapai County Area. The purpose of the pilot study was to develop an “Action Template” that could be used in other areas that currently have clean air and a desire to sustain the quality of life. The Central Yavapai County region was selected for the pilot study for its current clean air, but rapid growth. Although the region does not currently violate the National Ambient Air Quality Standards (NAAQS), the dramatic population growth expected during the next twenty years poses a potential threat to the maintenance of clear and healthy air.

The first phase of the pilot study carried out a “visioning process” with local officials, public works staff, and other participants. The study is documented in the report *Sustaining Clean Air in the Central Yavapai County Area: A Pilot Study*, April 2000. A Clean Air Action Plan, produced by the visioning process, lists the following actions that local jurisdictions should take toward sustaining clean air:

- Set up Air Quality Steering Committee
- Design and Conduct Outreach/Educational Program—Identify Planning/Design Measures
- Scope and Conduct Monitoring Pilot Study—Identify Sites, Cost, ADEQ Involvement
- Identify Voluntary Measures
- Estimate Costs, and Identify Funding Sources
- Develop Ordinances, Estimate Costs, and Identify Funding Issues

Phase II of this pilot project provided assistance to the Central Yavapai Transportation Planning Organization (CYTPO) in implementing the Clean Air Action Plan and in developing an air quality outreach program. The study also developed a framework and educational material for an air quality educational outreach program that could be used in both Central Yavapai County and other areas in Arizona that desire to set up such a program. This report presents the outreach program designed specifically for CYTPO to implement within Central Yavapai County. A separate report provides a general guide for other areas to follow in developing and implementing a similar outreach program.

The CYTPO established an Air Quality Steering Committee to oversee the development of the Outreach Program. Table 1 lists the Steering Committee members. The roles of the Steering Committee include the following:

- Provide input and feedback in the development of an outreach framework

- o Help to identify target audiences for the program
- o Assist in narrowing the range of outreach techniques for the program
- o Review and comment on sample outreach materials
- o Identify roles for agencies in implementing the Outreach Program

**TABLE 1. AIR QUALITY STEERING COMMITTEE  
CENTRAL YAVAPAI TRANSPORTATION PLANNING ORGANIZATION**

<b>Member</b>	<b>Representing</b>
Larry Tarkowski	Town of Prescott Valley Public Works
Tom Long	City of Prescott Public Works
Ron Grittmann	Town of Chino Valley Public Works
Richard Straub	Yavapai County Public Works
Mike Flannery	Prescott Valley Town Council
David Sommer	Prescott Chamber of Commerce
Pat Cupell	Arizona Department of Transportation

**ORGANIZATION OF THIS REPORT**

The next chapter presents an overview of a framework for the Outreach Program. Chapter 3 then discusses the outreach techniques that are recommended to “start up” the program in Central Yavapai County. The final chapter presents recommended actions, responsibilities, and schedule for implementing the program.

## 2. FRAMEWORK FOR THE OUTREACH PROGRAM

### GOALS AND OBJECTIVES FOR THE OUTREACH PROGRAM

The overall goal of the Outreach Program is summarized by the air quality vision statement developed in the first phase of the project.

*The residents of Central Yavapai County will participate in a **proactive** effort to keep the **air clean** and preserve the high **quality of life** in the region. This **regional** effort will demonstrate **national leadership**, while **avoiding** the detrimental medical, environmental, **lifestyle**, and **economic** impacts experienced in regions with unhealthy air. Local governments will achieve this goal by taking continuing and **cooperative** actions to **sustain clean air**, even as the region **grows** substantially over the next twenty years.*

Phase I of the project identified numerous strategies for pursuing the goals contained in the air quality vision statement, one of which is the development of an educational and outreach campaign to sustain clean air. The goal of this multi-media campaign is the promotion of activities which will help to sustain air quality in Central Yavapai County.

### THEME OF THE OUTREACH PROGRAM

As a first step in developing the Outreach Program, a graphical representation of effort was developed together with the Steering Committee. A logo was developed incorporating:

- Geography, nature, and landscape of Central Yavapai County
- Characteristics of the environment
- Air and air quality
- Focus on preserving and improving air quality
- A slogan and overriding theme

Figure 1 introduces the logo for the outreach effort. The graphic identifies the jurisdictions spearheading the effort without restricting the geographical extent to particular jurisdictional boundaries. Additionally, the logo stylizes the open spaces as well as the mountainous terrain surrounding the Central Yavapai area. Through the chosen slogan of AIR AWARE, focus is directed to the sustainability of the current air quality by emphasizing the preservation of a good condition. Overall, the logo will aid in creating interest, attention, and identification for the outreach effort.

**FIGURE 1. LOGO FOR THE AIR AWARE OUTREACH EFFORT**



SOURCE: LIMA & ASSOCIATES

## **TARGET AUDIENCES**

Air quality affects everyone. Local residents and visitors alike will benefit from sustaining the air quality or suffer from increased air pollution. Therefore, the Outreach Program should target the general public, and special attention should be paid to ensure that all segments of the population are reached. Moreover, it is important that outreach activities strive to provide information in regard to the most effective strategies for sustaining clean air. Table 2 lists the control strategies for sustaining air quality as they were identified during Phase I of the project. Each strategy is paired with the potential target group affected by the strategy. Additionally, possible mechanisms for reaching the specific groups are identified.

Based on the control strategies, several segments of the population have been identified as being essential to the effectiveness of the Outreach Program. The Steering Committee identified schools as a key target for the Program. The identification of additional target segments and groups will aid in further focusing the outreach effort. A database should be developed to manage this information. As the Outreach Program evolves, the database could be used to facilitate mailings and specifically indicate interested groups and individuals. Table 3 introduces an outline of possible target segments and groups. Appendix A presents a sample report of individuals, institutions, and organizations in the Central Yavapai area.

**TABLE 2. CONTROL STRATEGIES FOR SUSTAINING AIR QUALITY  
IN CENTRAL YAVAPAI COUNTY AND TARGET GROUPS**

<b>Air Quality Control Strategy</b>	<b>No. of Votes</b>	<b>Type of Measure</b>	<b>Target Group</b>	<b>Outreach Measure</b>
Fugitive Dust Control	11	Ordinance	Construction and earth moving operators	Informational material through permitting process
Clean Burning Fireplaces	11	Ordinance	General Public, home buyers, home builder, developers	Informational material through permitting process, deed restrictions
Educational Outreach Program	10	Voluntary Program	General public See Table 4	Outreach program including informational material, educational programs, etc.
Mitigation Bond Requirement	8	Ordinance	Construction and earth moving operators	Informational material through permitting process
Stabilize Unpaved Roads	7	Municipal Program	Jurisdictions, State and Federal agencies	Intergovernmental cooperation and coordination
Rapid Cleanup of Material Deposits on Paved Roads	6	Ordinance	Property owner, operator	Informational material through vehicle registration and license process
Encourage Clean Industries	5	Municipal Policy	Jurisdictions, chambers of commerce	Intergovernmental cooperation and coordination
Public Information Program on Fireplaces	5	Municipal Program	General public, homeowners with fireplaces	News media, television, Press and radio, internet,
Alternatives to Single Occupant Vehicles	4	Municipal Program	General public, motor vehicle operators, jurisdictions, employers	Informational material through vehicle registration and license process; News media, television, Press and radio, internet,
Innovative Land Use Planning	4	Municipal Plan Zoning	Jurisdictions	Intergovernmental cooperation and coordination



**TABLE 2. CONTROL STRATEGIES FOR SUSTAINING AIR QUALITY  
IN CENTRAL YAVAPAI COUNTY AND TARGET GROUPS (Continued)**

<b>Air Quality Control Strategy</b>	<b>No. of Votes</b>	<b>Type of Measure</b>	<b>Target Group</b>	<b>Outreach Measure</b>
Control Bulk Material Transport	3	Ordinance	Truck operators	Informational material through vehicle registration and license process;
Limit Cold Starts & Idling	3	Voluntary Program	General public, businesses, jurisdictions vehicle operators	Informational material through vehicle registration and license process; News media, television, press, radio, internet;
Employer-Based Measures	3	Voluntary Program	Local employers	Chamber of Commerce, Business associations,
Stabilize Dust on Public Property	2	Municipal Program	Jurisdictions	Intergovernmental cooperation and coordination
Stabilize Unpaved Shoulders and Access Points	2	Municipal Program	Jurisdictions	Intergovernmental cooperation and coordination
Encourage Conversion to Alternative Fuels	2	Voluntary Program	General public, motor vehicle operators	Informational material through vehicle registration and license process
Traffic Flow Measures	1	Municipal Program	Jurisdictions	Intergovernmental cooperation and coordination
Provide Alternative Heating Options	1	Voluntary Program	Utilities, providers, developers, builders	Information through permitting process
Limit Heavy Duty Vehicle Idling	1	Voluntary Program	Truck and bus operators	Informational material through vehicle registration and license process

Note: The visioning group developed this list of potential strategies for sustaining clean air. The number of votes represent the members' votes in support of a particular strategy. A high number of votes indicate high support for a strategy.

**TABLE 3. TARGETED SEGMENTS AND GROUPS**

<b>Target Segment</b>	<b>Target Group</b>
Civic Associations	Neighborhood Associations, Civic Club, Senior Citizen Organizations, Civil Rights Organizations, Community and Social Service Organizations
Commerce	Business and Trade Organization, Utilities, Tourism, Chamber of Commerce, Builders, Developers, Minority Business Associations, Labor Organizations
Education	Libraries, Museums, Universities/Colleges, Schools, Education/Academics
Environmental	Environmental Organizations
General Public	Homeowners, Interested Individuals
Government	Federal Agency, Agriculture, Local Jurisdiction, State Agency, Local Governments, Native American Tribal Governments
Health Care	Health Care Organization, Health Care Provider, Public Health Agencies and Clinics
Media	Television, Newspaper, Radio, Internet
Religious Organization	Church, Temple, Ministerial Associations
Traveling Public	Motor Vehicle Operators, Transit Riders, Auto Clubs/Associations, Airports

## Stakeholder Database

A database application should be developed to track contacts in the identified target groups and other potentially interested stakeholders in the process. Figure 2 presents a possible layout for such an application.

**FIGURE 2. AIR AWARE OUTREACH DATABASE**

ID	<input type="text"/>	State	AZ
Entity	City of Prescott	Zip	86301
Web address	<input type="text"/>	Phone	520-776-6260
Contact Name	<input type="text"/>	Fax	<input type="text"/>
Contact Position	Public Works Department	E-mail	<input type="text"/>
Address	436 N. Virginia St.	Toll Free	<input type="text"/>
City	Prescott		

Record: 7 of 45

Source: Lima & Associates

## OUTREACH SPONSORS

Based on the database, efforts should be undertaken to identify potential outreach sponsors, who should be contacted to solicit their participation in the program. There are several ways in which stakeholders can participate:

- Jurisdictional buy-in, representation of AIR AWARE as a motto in civic functions.
- Jurisdictions and utilities could assist in funding the design and creation of collateral materials. Such materials can be included in monthly utility billings to residents, or AIR AWARE announcements can be included in newsletters, which are often included in such billings. At a minimum, these newsletters could display the AIR AWARE logo signifying the endorsement and participation of the jurisdiction or utility.
- School districts could develop AIR AWARE "units" for classroom use, and begin by ensuring that faculty members themselves are informed on clean air issues. Science classes could include segments on solar energy and alternative fuels, stressing the importance of future clean air to today's youth.

- Chambers of Commerce, service clubs, and other civic organizations could be asked to participate, by assisting with funding, by including the logo and information in their mailings, and perhaps, by providing volunteers to aid in making presentations to other groups.

The Prescott Chamber of Commerce has suggested that it may incorporate the Air Quality Outreach Program into other Outreach Programs that the Chamber conducts. Other civic organizations and local jurisdictions should also be encouraged to become sponsors of the Outreach Program.

## **MEDIA COMPONENTS**

To enable the Outreach Program to effectively target the general public, a series of measures could be implemented to support the AIR AWARE program. Table 4 lists these possible mechanisms. Emphasis should be given to materials for community media including the following:

- Informational and educational fact sheets
- Public service advertisements for newspapers (Area Newspapers themselves should be encouraged to become sponsors of the campaign by running such ads, as well as announcements of AIR AWARE activities, free of charge)
- Public service announcement scripts for radio and television
- Press Releases
- Graphical presentations
- Mass mailings

As part of this study, separate notebooks have been prepared that include many examples of a wide array of related educational material from various local, regional, state, and federal agencies throughout the nation.

The next chapter presents specific techniques that may be used to start the Outreach Program in Central Yavapai County.

**TABLE 4. POTENTIAL AIR QUALITY OUTREACH COMPONENTS**

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<b>Outreach Component</b>
Informational Fact Sheets – Problem Definition, Description Of Current Activities, Key Contact Persons
Educational Fact Sheets– Description Of Air Pollutants And Strategies
Scripts For Radio Spots
Material For Newspaper
Poster Boards
Displays for Open Houses
Speakers Bureau
Off-the-Shelf Videos
Neighborhood Meetings
Business Group Meetings
Structure for Workshops
Material for Public Area Display
Structure for Hot Line
Material for Opinion Polls
Community Access TV
Suggested Briefings with Decision Makers
Structure for Public Panel Discussions
Structure for Press Briefings
Suggested Mailings
Material for Web Page

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### **3. RECOMMENDED “START UP” OUTREACH TECHNIQUES**

The major objective of the Outreach Program is to create awareness of issues regarding air quality among the public. As identified by the Steering Committee, particular focus will be given to the dissemination of information through various methods to educate and create awareness. Next to the general public, the Steering Committee identified young people and especially students as the premiere target group. The Steering Committee saw the greatest benefit in educating young people to develop a high awareness for air quality related issues. Additionally, young people will address and discuss issues of importance to them with their peers and parents, creating awareness of the issues in broader segments of the population. Thus, the Outreach Program will focus on providing information to the general public and especially on educational programs.

Three outreach techniques have been designed for Central Yavapai County: an AIR AWARE Internet Site, sample fact sheets, and a slide presentation. These techniques are discussed below, together with a suggested structure for an educational program aimed at schools.

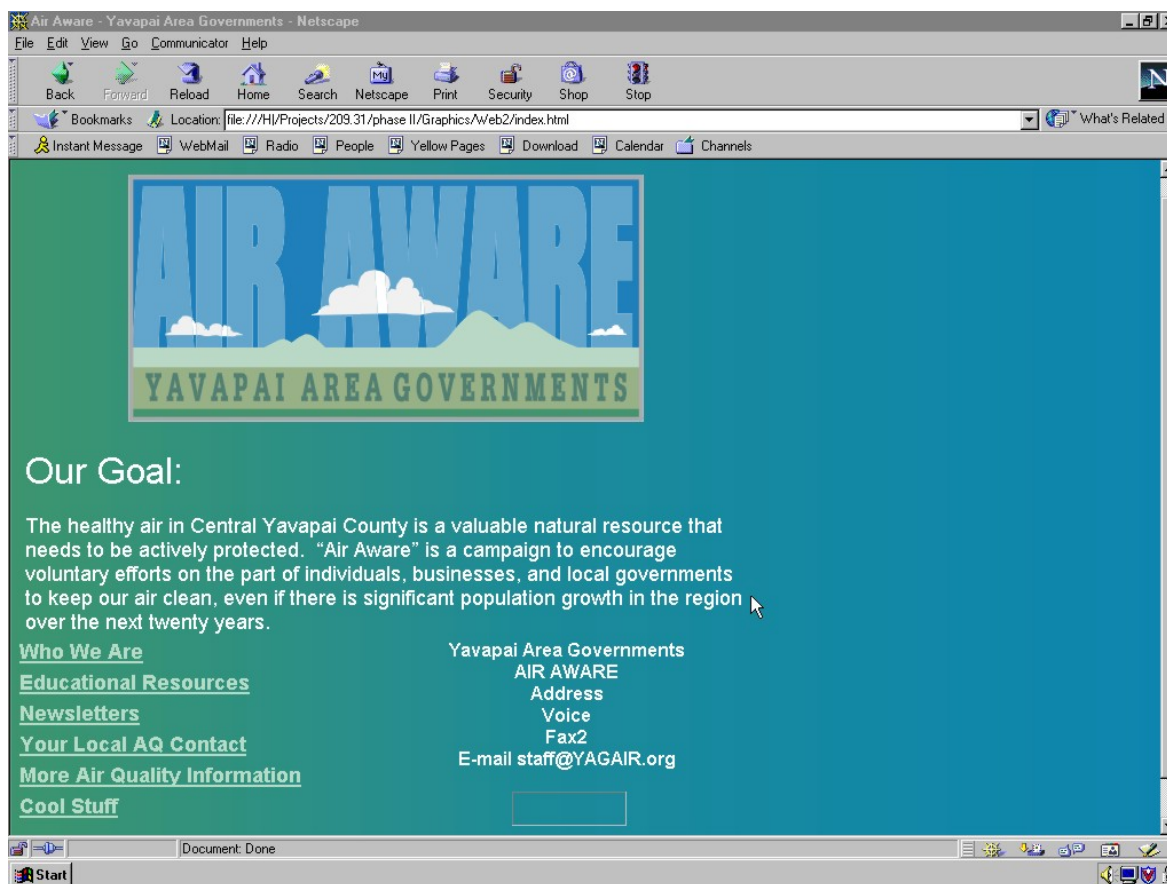
#### **AIR AWARE INTERNET SITE**

A draft Web site was developed for the Central Yavapai County Air Quality Outreach Program. As with most media, an attractive design as well as the availability and accuracy of the information provided are critical to the development of a successful Web site. The Web site could include general information on the Outreach Program, informational materials, and possibly the slide show discussed below. Figure 3 presents a suggested Web site home page for AIR AWARE.

Since the AIR AWARE theme is community-wide, a variety of related “portal” sites could be identified. The logo should be used as an icon to establish links from these other Internet sites to the AIR AWARE site. Possible “portal sites” are presented in Table 5.

Any applicable outreach material developed for the AIR AWARE program should be made available on the site. Any information regarding program activities should be listed and kept current on the site. Overall, the site should develop into the information and communication center of the program. Updated educational materials could be made available for downloading by teachers and others. A special section of the site should be devoted to reaching out to young people. Activities such as quizzes and contests are likely to stimulate interest in the subject. Links could be provided for informational, technical, and educational materials related to air quality. Table 6 presents a selection of possible links providing information on the subjects. The site should be interactive and encourage feedback from visitors, and should provide a guest book where visitors can share suggestions about activities which promote clean air.

**FIGURE 3. AIR AWARE WEB SITE HOME PAGE**



SOURCE: Lima & Associates

**TABLE 5. POSSIBLE AIR AWARE “PORTAL SITES”**

Entity	Web address
Arizona Public Service	<a href="http://about.apsc.com/default.asp">http://about.apsc.com/default.asp</a>
Chino Valley Area Chamber of Commerce	<a href="http://www.chinovalley.org/">www.chinovalley.org/</a>
City of Prescott	<a href="http://www.ci.prescott.az.us/">www.ci.prescott.az.us/</a>
Embry-Riddle Aeronautical University	<a href="http://www.embryriddle.edu">www.embryriddle.edu</a>
Ferrellgas	<a href="http://www.ferrellgas.com/">http://www.ferrellgas.com/</a>
Prescott Chamber of Commerce	<a href="http://www.prescottchamber.org/">www.prescottchamber.org/</a>
Prescott College	<a href="http://www.prescott.edu/">www.prescott.edu/</a>
Prescott National Forest	<a href="http://www.fs.fed.us/r3/prescott/">www.fs.fed.us/r3/prescott/</a>
Prescott Public Library	<a href="http://www.prescottlib.lib.az.us/">www.prescottlib.lib.az.us/</a>
Prescott Valley Chamber of Commerce	<a href="http://www.pvchamber.org">www.pvchamber.org</a>
Prescott Valley Economic Development Foundation	<a href="http://www.pvedf.com">www.pvedf.com</a>
Prescott Valley Library	<a href="http://www.ci.prescott-valley.az.us/newsite/library.htm">www.ci.prescott-valley.az.us/newsite/library.htm</a>
The Daily Courier	<a href="http://www.westernnews.com/wni.htm">http://www.westernnews.com/wni.htm</a>
Town of Chino Valley	<a href="http://www.ci.chino-valley.az.us">www.ci.chino-valley.az.us</a>
Town of Prescott Valley	<a href="http://www.ci.prescott-valley.az.us">www.ci.prescott-valley.az.us</a>
Yavapai College	<a href="http://www.yavapai.cc.az.us/">www.yavapai.cc.az.us/</a>
Yavapai County	<a href="http://www.co.yavapai.az.us/">www.co.yavapai.az.us/</a>

**TABLE 6. SAMPLE EDUCATIONAL MATERIAL  
FOR AIR AWARE INTERNET SITE**

<b>Agency</b>	<b>Web Address</b>
List of Government Sites	<a href="http://www.earthmatters.net/elinks.htm">www.earthmatters.net/elinks.htm</a>
American Lung Association	<a href="http://www.airwise.org">www.airwise.org</a>
Oregon DEQ	<a href="http://www.deq.state.or.us/aq/airpollu.htm">www.deq.state.or.us/aq/airpollu.htm</a>
Oklahoma DEQ	<a href="http://www.deq.state.ok.us">www.deq.state.ok.us</a>
Puget Sound Clean Air Agency	<a href="http://www.pscleanair.org/index.htm">www.pscleanair.org/index.htm</a>
Louisiana Department of Environmental Quality	<a href="http://www.deq.state.la.us/assistance/educate/index.htm">www.deq.state.la.us/assistance/educate/index.htm</a>
Bay Area Air Quality District: Spare the Air 2000	<a href="http://www.spareair.org">www.spareair.org</a>

**FACT SHEETS**

Fact sheets provide both general information and discussion of specific air quality strategies. The following fact sheets have been prepared as a beginning for the Outreach Program:

- o General Information Fact Sheet on the AIR AWARE Program
- o Fact Sheet on Sustaining Clean Air in Central Yavapai County
- o Fact Sheet on Clean Burning Fireplaces

The sample fact sheets are included in Appendix B. These Fact Sheets and other material should be distributed to the libraries, schools, and public buildings. In addition, the Fact Sheets should be attached to the AIR AWARE Internet site.

**MODEL ORDINANCE**

During the conduct of the study, the Steering Committee asked that a model ordinance be developed that jurisdictions could enact in order to regulate the construction and installation of fireplaces, wood stoves, and other solid fuel burning devices to reduce the air pollution caused by particulate matter and carbon monoxide. The model ordinance that was drafted in response to this request is included as Appendix C.

**SLIDE PRESENTATION**

A sample script and a slide presentation have been prepared for the Outreach Program. Appendix D includes the draft script. The slide presentation has been designed for the general public and includes the following topics:

- o Visioning Process and Outreach Campaign
- o Background on Air Pollution



- Air Quality for Central Yavapai County
- Air Pollution Control Strategies
- What You Can Do

The slide presentation could be used for the following:

- Presentation to schools, civic, and business organizations
- Basis for Prescott access channel video
- Attachment for the Web site

A sample slide presentation on Sustaining Clean Air in Central Yavapai County can be viewed on ADOT's Air Aware Web site, <http://www.dot.state.az.us/about/air/index.htm>

## **EDUCATIONAL OUTREACH MATERIAL**

As previously noted, the Steering Committee identified schools as a key target group for the Outreach Program. In addition, the Prescott Chamber of Commerce has suggested that it may incorporate the Air Quality Outreach Program into other programs the Chamber conducts. The Chamber could take the lead in introducing the Air Quality Outreach Program to grade schools, high schools, and local institutions of higher learning. The development of the educational outreach effort can be distinguished in two main groups:

- Teacher/Student Education
- Technical Personnel Education

### *Teacher/Student Education*

Educational programs could be developed internally through the curriculum of local schools or can be obtained through commercially available sources. Materials which could be developed locally include:

- AIR AWARE manuals and fact sheets for administration and teachers
- AIR AWARE educational materials for students
- Work books
- Coloring books
- Posters, games, and puzzles

One commercial source is *Educational Development Specialist*, an organization that specializes in environmental education programs. The educational programs offered range from nature conservancy, recycling, to pollution courses. The materials offered contain teacher guides, posters, templates, and videos and are geared for children in kindergarten through grade 6. The organization is currently developing an AIR CARE program focusing on air quality. Through the program, students will learn about the causes of air pollution, the effects on our health, and the contribution vehicles make to pollution.

Other organizations, such as the Environmental Protection Agency, provide additional educational resources. The Puget Sound Clean Air Agency developed a "Clean Air Express" as a means to provide information on air quality to young people.

All these initiatives are often carried forward and championed by individuals who are interested in the subject. If such an interest and commitment is present, curricular activities can be complemented with extracurricular activities such as workshops or contests. The creation, through a contest, for example, of an AIR AWARE mascot similar to "Woodsy Owl" with his "Give a hoot, don't pollute" motto would lend additional focus to the effort, especially in reaching out to young people.

### *Technical Education*

Technical courses are available from various organizations. Technical information beyond curricular activities can be obtained for example from the Environmental Protection Agency's Education and Outreach Group (<http://www.epa.gov/oar/oaqps/eog/pop.html>). The mission of that group is to assist the general public in understanding basic air quality issues. The group publishes brochures, flyers, fact sheets, information exchange forums, community activities, and videos. The same group has established an Air Pollution Distance Learning Network, which is an educational satellite broadcasting network of over 100 governmental and university broadcast affiliates throughout the United States. The interactive program is geared toward state and local governmental professionals as well as the private sector.

## **4. IMPLEMENTATION PROGRAM**

### **LOCAL RESPONSIBILITY FOR IMPLEMENTATION**

During the Air Quality Pilot Study Phase I, the Visioning Group recommended that the Central Yavapai Transportation Planning Organization (CYTPO) and its eventual successor, an MPO, take responsibility for the action plan that the Visioning Group prepared. Subsequently an Air Quality Steering Committee was formed as a subcommittee of CYTPO in order to continue the cooperation of the local jurisdictions. In the spirit of cooperation, each jurisdiction should continue to work towards addressing air quality issues in their ongoing planning and programming.

### **AIR AWARE COORDINATOR**

A focal point is needed to coordinate the various activities among the jurisdictions and stakeholders, especially in light of the identified educational outreach campaign. An AIR AWARE coordinator should be designated to coordinate the efforts possibly with shared responsibilities among all the jurisdictions. One possibility for an AIR AWARE coordinator is the new planner position that Yavapai County has established for regional planning and eventually for MPO planning activities. The roles of the Coordinator should include the following:

- Coordinate with jurisdictions and other entities, citizens on implementation of the program
- Maintain the AIR AWARE Internet Site
- Make presentations to schools, City Councils, County Board of Supervisors, civic and business groups, and other groups
- Respond to citizen comments
- Maintain technical expertise

### **ACTIONS FOR DEVELOPMENT AND IMPLEMENTATION**

As outlined through the guidance of the Steering committee, the effort should focus on the implementation of an Outreach/Educational program. Most critical is the identification of a staff function to coordinate the efforts and serve as a focal point for the program. Table 7 outlines a series of basic actions to be taken to implement the Outreach Program.

**TABLE 7. SCHEDULE FOR IMPLEMENTATION PROGRAM**

<b>Task</b>	<b>Responsibility</b>	<b>Date</b>
Recommend Air Quality Implementation Program to CYTPO	Steering Committee	January 2001
Adopt AIR AWARE Outreach Program	CYTPO	January 2001
Issue Press Release (Informational)	CYTPO	January 2001
Identify AIR AWARE Coordinator	Steering Committee, CYTPO	January 2001
Present Background Information To Councils And Board Of Supervisors [Access TV]	Jurisdictional Contacts	January 2001
Identify Contacts In Each Jurisdiction, Chambers Of Commerce	AIR AWARE Coordinator, Steering Committee	March 2001
Finalize Selected Fact Sheets Background Sheet General Information Sheet Clean Burning Fireplaces	AIR AWARE Coordinator	March 2001
Implement AIR AWARE Internet Site	AIR AWARE Coordinator	March 2001
Place Fact Sheets In Libraries, Schools, Public Buildings, Chambers Of Commerce	AIR AWARE, Jurisdictional Contacts	March 2001
Finalize Slide Presentation	AIR AWARE Coordinator	May 2001
Run Slide Presentation on Access TV	AIR AWARE Coordinator	June 2001
Make Presentations at Selected Groups	AIR AWARE Coordinator	Continuous
Assess Outreach Program and Develop Program for Second Year	AIR AWARE Coordinator, Steering Committee	Periodic

**APPENDIX A. CENTRAL YAVAPAI COUNTY TARGET  
SEGMENTS AND GROUPS**

**TABLE A-1. CENTRAL YAVAPAI COUNTY TARGET SEGMENTS AND GROUPS**

Target Segment	Target Group	Entity	Contact Name	Contact Position	Address	City	State	Zip	
<b>Civic Association</b>	Civic club								
	Neighborhood Association								
	Senior Citizen								
<b>Commerce</b>	Chamber of Commerce	Prescott Chamber of Commerce	David Sommer	CEO	P.O. Box 1147	Prescott	AZ	86302-1147	
	Chamber of Commerce	Prescott Valley Chamber of Commerce	Lew Rees	Executive Director	8098 E. Hwy 69, Suite B	Prescott Valley	AZ	86314	
	Chamber of Commerce	Chino Valley Area Chamber of Commerce			864 N Hwy 89	Chino Valley	AZ	86323-5950	
	Economic Development	Prescott Valley Economic Development Foundation	Gary Marks	Executive Director	8168-C E. Florentine Rd.	Prescott Valley	AZ	86314	
	Tourism	Prescott Area Lodging Association			203 E Union St	Prescott	AZ	86303	
	Utilities	Arizona Public Service			120 N. Marina	Prescott	AZ	86301	
	Utilities	Citizens Utilities			201 Grove Avenue	Prescott	AZ	86301	
	Utilities	Ferrellgas			1122 E. Gurley Street	Prescott	AZ	86301	
	Utilities	Flame Propane			475 N. 6th Street	Prescott	AZ	86301	
	<b>Education</b>	Library	Prescott Library District	Barbara Kile	Director	172 E. Merritt St., Ste. E	Prescott	AZ	86301
Library		Prescott Public Library	Catherine Smothers	Business Manager	215 East Goodwin Street	Prescott	AZ	86303	
Library		Prescott Valley Library				Prescott Valley	AZ	86314	
Museum		Phippen Museum			4701 Hwy 89 N	Prescott	AZ	86301	
Museum		Sharlot Hall Museum			415 W Gurley St	Prescott	AZ	86301	
Museum		Smoki Museum/American Indian Art & Culture			147 N Arizona Ave	Prescott	AZ	86301	
Schools		Prescott Unified School District			146 S Granite Street	Prescott	AZ	86303	
University/College		Embry-Riddle Aeronautical University			3200 Willow Creek Rd.	Prescott	AZ	86301	
University/College		Prescott College	Jack Herring		220 Grove Avenue	Prescott	AZ	86301	
University/College		Yavapai College			1100 E. Sheldon St.	Prescott	AZ	86301	
<b>Environmental Organizations</b>	Sierra Club	Yavapai – Prescott Group	Joanne Finch		P O Box 1695	Prescott	AZ	86302	
	Audubon Society	Prescott Audubon Society	Karen O’Neil						
<b>General Public</b>	Interested Individuals								
<b>Government</b>	Agriculture	Arizona Farm Bureau Federation			3401 E. Elwood St.	Phoenix	AZ	85040-1625	
	Federal Agency	Prescott National Forest			344 South Cortez Street	Prescott	AZ	86303	
	Local Jurisdiction	Prescott Valley Town Council	Mike Flannery	Council Member					
	Local Jurisdiction	Town of Prescott Valley	Larry Tarkowski	Public Works Director	7501 Civic Cr	Prescott Valley	AZ	86314	
	Local Jurisdiction	City of Prescott	Tom Long	Public Works Department	436 N. Virginia St.	Prescott	AZ	86301	
	Local Jurisdiction	City of Prescott		Environmental Services Department	436 N. Virginia St.	Prescott	AZ	86301	
	Local Jurisdiction	Town of Chino Valley	Ron Grittman, P.E.	Public Works Director	PO Box 406	Chino Valley	AZ	86323	
	Local Jurisdiction	Yavapai County	Richard Straub	Public Works Director	1100 Commerce Drive	Prescott	AZ	86305	
	Indian Tribal Government	Yavapai-Prescott Indian Tribe	Stan Rice						
	State Agency	Arizona Department of Transportation	Pat Cupell	Sr. Air Quality Planner	206 S. 17 <sup>th</sup> Ave.	Phoenix	AZ	85007	
	<b>Health Care</b>	Health Care Organization	American Cancer Society			915 E Gurley St. Ste 202A	Prescott	AZ	86301
		Health Care provider	Yavapai Regional Medical Center			1003 Willow Creek Road	Prescott	AZ	86301
	<b>Media</b>	Internet							
Newspaper		The Daily Courier			147 N. Cortez	Prescott	AZ	86301	
Newspaper		Yavapai Free Press			432 S. Montezuma St.	Prescott	AZ	86303	
Newspaper		Arizona Senior World Newspapers Inc			40 N Sunway Dr Ste 1	Gilbert	AZ	85233	
Newspaper		Sun Shopper			P O Box 312	Prescott	AZ	86302	
Radio		KNOT Radio			P O Box 151	Prescott	AZ	86302	
Radio		KPPV 106.7 FM/KQNA 1130 AM			P O Box 26523	Prescott	AZ	86312	
Radio		KYCA Radio			P O Box 1631	Prescott	AZ	86302	
Radio		KGCB Radio 90.5 FM			5025 N. Hwy 89	Prescott	AZ	86301	
Radio		KOLT-COOL-EAGLE/Red Rock			233 White Spar Rd Ste #1	Prescott	AZ	86303	
Television	Access 13			P O Box 885	Prescott	AZ	86302		

**TABLE A-1. CENTRAL YAVAPAI COUNTY TARGET SEGMENTS AND GROUPS (Continued)**

Target Segment	Target Group	Entity	Contact Name	Contact Position	Address	City	State	Zip
	Television	KUSK-Channel 7			3211 Tower Rd	Prescott	AZ	86305
<b>Religious Organization</b>	Church							
	Temple							
<b>Traveling Public</b>	Airports	Prescott Airport						
	Auto clubs/associations							
	Motor Vehicle Operators							
	Bicycling Organizations	Prescott Bicycle ?						
	Alternative Transportation Organization	Prescott Alternative Transportation	Sue Knaup		P O Box 2122	Prescott	AZ	86302

## **APPENDIX B. SAMPLE FACT SHEETS**





# FACT SHEET

## THE AIR AWARE PROGRAM

### OUR GOAL:

The healthy air in Central Yavapai County is a valuable natural resource that needs to be actively protected. AIR AWARE is a campaign to encourage voluntary efforts on the part of individuals, businesses, and local governments to **keep our air clean**, even if there is significant population growth in the region over the next twenty years.

### WHO WE ARE:

AIR AWARE is sponsored by the Yavapai Area Governments, which include the Tri-Cities of Prescott, Prescott Valley and Chino Valley, the Yavapai-Prescott Indian Tribe, and central portions of Yavapai County.

### OUR AIR QUALITY MISSION STATEMENT:

*The residents of Central Yavapai County will participate in a **proactive** effort to keep the **air clean** and preserve the **high quality of life** in the region. This **regional effort** will demonstrate **national leadership**, while **avoiding** the detrimental medical, environmental, **lifestyle**, and **economic impacts** experienced in regions with unhealthy air. Local governments will achieve this goal by taking continuing and **cooperative** actions to **sustain clean air**, even as the region **grows** substantially over the next twenty years.*

### WHAT WILL WE DO? – OUR KEY EMPHASIS AREAS:

- AIR AWARE Website
- Curriculum Materials For Educators
- Public Service Announcements For Newspapers, Radio, and TV
- Field Manuals for Construction Practices
- Mass Mailings
- Speakers' Bureau
- Outreach Database
- Press Releases

## **WHAT HAVE WE DONE SO FAR: THE AIR QUALITY SUSTAINABILITY STUDY**

In 1999, representatives of the Yavapai Area Governments and Prescott College participated in a pilot air quality sustainability study, sponsored by the Arizona Department of Transportation (ADOT), and identified an educational/outreach program as an important strategy to sustain clean air in Central Yavapai County. AIR AWARE is the follow-up effort to develop and implement the educational/outreach program also funded by ADOT .

## **WHAT ELSE IS BEING DONE?**

Jurisdictions represented by the Yavapai Area Governments may also consider adopting an ordinance that would ban wood-burning fireplaces (unless they are clean-burning by Environmental Protection Agency standards) in new residential construction.

## **AIR AWARE SPONSORS**

Other Sponsors – Central Yavapai Transportation Planning Organization, Prescott Chamber of Commerce, and Prescott Alternative Transportation.

## **BECOME A SPONSOR:**

Call the AIR AWARE Coordinator.

## **FOR MORE INFORMATION:**

Visit the AIR AWARE Web site at [www.dot.state.az.us/about/air/index.html](http://www.dot.state.az.us/about/air/index.html)



# **FACT SHEET**

## **SUSTAINING CLEAN AIR IN CENTRAL YAVAPAI COUNTY**

Central Yavapai County is one of the fastest growing areas in Arizona. Although our region does not currently violate the national standards for any air pollutants, the dramatic growth in population, jobs, and vehicle travel expected during the next twenty years poses a potential threat to maintaining clear and healthy air.

In order to prevent the degradation of our air quality, elected officials, local government representatives and others with environmental interests in Central Yavapai County participated in an air quality visioning process sponsored by the Arizona Department of Transportation (ADOT) during the Fall of 1999. The purpose of the visioning process was to:

1. Provide information on the current status of air quality in the area
2. Discuss potential problems, opportunities, costs and benefits of sustaining clean air over the next twenty years
3. Identify control strategies that might be feasible for implementation in the Central Yavapai County area

The following vision statement was developed by participants:

*The residents of Central Yavapai County will participate in a proactive effort to keep the air clean and preserve the high quality of life in the region. This regional effort will demonstrate national leadership, while avoiding the detrimental medical, environmental, lifestyle and economic impacts experienced in regions with unhealthy air. Local governments will achieve this goal by taking continuing and cooperative actions to sustain clean air, even as the region grows substantially over the next twenty years.*

### **AIR QUALITY SUSTAINABILITY STRATEGIES**

Participants evaluated and screened 47 potential air quality sustainability strategies and selected 19 for further consideration in Central Yavapai County. The top five priority strategies were:

1. Fugitive Dust Control Plans. Adopt an ordinance requiring construction and earth moving operators to develop dust control plans and apply control measures to minimize dust at the project site. The plan would have to be approved before a grading and drainage permit was issued.

2. Clean Burning Fireplaces in New Construction. Develop an ordinance that prohibits the installation or construction of fireplaces and wood stoves in new construction, unless the devices are “clean burning” as certified by the Environmental Protection Agency.
3. Educational and Outreach Campaign to Sustain Clean Air. Conduct a comprehensive multi-media campaign to promote voluntary strategies such as alternative transportation modes, compressed work schedules, telecommuting, alternative fuels for vehicles, alternatives to wood burning in the winter, and fueling vehicles after sunset in the summer.
4. Mitigation Bond Requirement. Require dust control plans (in #1 above) to be accompanied by a letter of credit or bond, which guarantees that the dust will be controlled.
5. Stabilize Unpaved Roads and Alleys. Pave, gravel, or stabilize all unpaved roads and alleys carrying a significant volume of vehicle traffic.

## **CLEAN AIR ACTION PLAN**

A final product of the visioning process was a Clean Air Action Plan, listing actions to be taken, responsibilities, and general time frames for implementing the actions. The goal of the Clean Air Action Plan is to sustain the current air quality in the region and avoid any possibility that the region would be classified as a nonattainment area in the future. The Plan identifies five tasks:

1. Set up an Air Quality Steering Committee
2. Scope and conduct a monitoring pilot study
3. Design and conduct an air quality outreach/education program
4. Identify voluntary measures
5. Develop ordinances

## **EDUCATIONAL AND OUTREACH CAMPAIGN**

In 2000 ADOT provided funding to initiate the third strategy, Educational and Outreach Campaign to Sustain Clean Air, now known as the Yavapai Area Governments’ AIR AWARE Program. The second strategy, requiring clean burning fireplaces in new construction, is also being considered for implementation by local governments in Central Yavapai County.

Our ongoing efforts to sustain clean air in Central Yavapai County are pioneering. Ours is one of the first attempts in the nation to proactively protect air quality in an area that is well within the national standards. Implementing the Clean Air Action Plan will ensure that air quality in the area is not degraded, despite dramatic increases in population growth over the next twenty years. Air quality and the overall quality of life in the region can be sustained through a coordinated regional partnership with a clear vision and direction.

### **FOR MORE INFORMATION:**

Visit the AIR AWARE Web site at [www.dot.state.az.us/about/air/index.html](http://www.dot.state.az.us/about/air/index.html)

or call the Air Aware Coordinator.



# FACT SHEET

## WOODBURNING AND AIR QUALITY

Wood burning contributes to carbon monoxide and fine particulate matter (PM) air pollution. Carbon monoxide and PM are unhealthy to breathe at high concentrations, especially for the young, the elderly and those with lung or cardiovascular disease. Although the Central Yavapai County area does not currently violate the national air quality standards for these pollutants, significant increases in people, jobs, and vehicle travel over the next twenty years could degrade our clean air. Reducing wood burning is one way to offset the negative effects of growth on our air quality.

The incomplete burning of wood causes tiny particles and gases, including carbon monoxide, to be released into the air. Because wood burning typically occurs in the winter, higher amounts of carbon monoxide and PM pollution can also occur then. To make matters worse, temperature inversions often take place on winter evenings, sandwiching a layer of warmer polluted air between a cooler upper air mass and the ground. This “traps” air pollution until the next morning, when traffic and wood burning add more emissions, resulting in even higher concentrations. The Arizona Department of Environmental Quality has estimated that wood burning may cause as much as 40 percent of the pollution in neighborhoods during temperature inversions. So it is especially important to limit wood burning activities during winter inversion conditions.

### WHAT OTHER AREAS ARE DOING:

Many areas have implemented wood burning restrictions in order to reduce wintertime air pollution. Some examples are:

- **Albuquerque** issues no-burn advisories on high pollution days between October 1 and February 28.
- **Denver** prohibits most wood burning activity on “high pollution days” between November 1 and March 31.
- **Flagstaff** prohibits the installation or sale of wood heaters or fireplace inserts that fail to meet Environmental Protection Agency certification standards. Also prohibits coal burning.
- **Maricopa County** issues “air quality alerts” when carbon monoxide or particulate concentrations are high and weather conditions dictate between October 1 and February 29. During such alerts, all non EPA-certified wood burning devices must be shut down within three hours.

Most jurisdictions exempt wood burning devices that are a home's sole source of heat.

Arizona taxpayers can deduct up to \$500 from Arizona gross income for the cost of converting an existing wood-burning fireplace to natural gas or electric logs or a permanent EPA-certified wood stove insert or replacing an existing wood stove with an EPA-certified one.

### **WHAT YOU CAN DO:**

1. Take advantage of the Arizona tax deduction and convert your wood burning fireplace to natural gas or electric logs or an EPA-certified low-emission device.
2. Use seasoned (dried at least 6-8 months) firewood to provide the cleanest, cheapest and safest fire.
3. Don't use anything (i.e. organic material, rubbish, or chemically treated wood) but paper to start the fire and use properly seasoned firewood.
4. Avoid recreational use of wood burning fireplaces on winter evenings and mornings when winds are light and the temperature is less than 40 degrees.
5. If smoke is visible from your chimney, open the damper to provide more air.
6. Allowing a wood fire to smolder produces the most pollution and greatly increases creosote buildup in the chimney.
7. Support local ordinances requiring clean burning fireplaces and wood stoves in new construction.

### **FOR MORE INFORMATION:**

Visit the AIR AWARE Web site at [www.dot.state.az.us/about/air/index.html](http://www.dot.state.az.us/about/air/index.html)  
or call the Air Aware Coordinator.

**APPENDIX C. A MODEL ORDINANCE RELATING TO  
FIREPLACE AND WOOD STOVE RESTRICTIONS**



**A MODEL ORDINANCE  
RELATING TO FIREPLACE AND WOOD STOVE RESTRICTIONS**

The purpose of this ordinance is to regulate the construction and installation of fireplaces, wood stoves, and other solid fuel burning devices to reduce the air pollution caused by particulate matter and carbon monoxide.

WHEREAS, wood-burning has been identified as a significant source of particulate matter and carbon monoxide emissions in Central Yavapai County; and

WHEREAS, the population of Central Yavapai County is expected to grow significantly over the next twenty years; and

WHEREAS, Central Yavapai County currently meets the national ambient air quality standards for all pollutants; and

WHEREAS, local governments in Central Yavapai County seek to protect the air quality from degradation, despite significant population growth; and

WHEREAS, the Central Yavapai County “Air Aware” Campaign has developed a model ordinance to provide uniform guidelines for regulating emissions and standards for construction and installation of fireplaces, wood stoves, and other solid-fuel burning devices to reduce the air pollution caused by particulate matter and carbon monoxide.

THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY/TOWN OF \_\_\_\_\_, ARIZONA, as follows:

Section 1: Fireplace and Wood Stove Restrictions

- A. For purposes of this section, the following words and terms shall have the meaning ascribed thereto:

**Fireplace** means a built-in-place masonry hearth and fire chamber or a factory-built appliance, designed to burn solid fuel or to accommodate a gas or electric log insert or similar device, and which is intended for occasional recreational or aesthetic use, not for cooking, heating or industrial processes.

**Solid Fuel** includes, but is not limited to, wood, coal or other nongaseous or nonliquid fuels.

**Wood Stove** means a solid fuel burning heating appliance including a pellet stove, which is either freestanding or designed to be inserted into a fireplace.

- B. On or after December 31, 2001, no person, firm or corporation shall construct or install a fireplace, wood stove or other solid fuel-burning device, and the city/town shall not approve or issue a permit to construct or install a fireplace, wood stove, or

solid fuel burning device, unless the fireplace, wood stove, or solid fuel-burning device complies with one of the following:

1. The fireplace has a permanently installed gas or electric log insert.
  2. The fireplace, wood stove, or other solid fuel burning device has been certified by the United States Environmental Protection Agency as conforming to 40 Code of Federal Regulations Part 60, Subpart AAA, as in effect on July 1, 1990.
  3. The fireplace, wood stove, or other solid fuel burning device has been tested and listed by a nationally recognized testing agency to meet performance standards equivalent to those adopted by 40 Code of Federal Regulations Part 60, Subpart AAA, as in effect on July 1, 1990.
  4. The fireplace has a permanently installed wood stove insert that complies with paragraphs 2 or 3 above.
- A. The following installations are not regulated and are not prohibited by this section:
1. Furnaces, boilers, incinerators, kilns, and other similar space heating or industrial process equipment.
  2. Cookstoves, barbeque grills, and similar appliances designed primarily for cooking.
  3. Firepits, barbeque grills, and other outdoor fireplaces.
- A. On or after December 31, 2001, no person, firm or corporation shall alter or remove a gas or electric log insert or wood stove insert from a fireplace for purposes of converting the fireplace to directly burn wood or other solid fuel.
- B. On or after December 31, 2001, no person, firm or corporation shall alter a fireplace, wood stove, or other solid fuel burning device in any manner that would void its certification or operational compliance with the provisions of this section.
- C. In addition to the provisions and restrictions of this section, construction, installation or alteration of all fireplaces, wood stoves, and other gas, electric, or solid fuel burning devices and equipment shall be done in compliance with the provisions of the city/town code and shall be subject to the permits and inspections required by the city/town.
- D. Fireplaces constructed or installed on or after December 31, 2001 shall not be altered without first obtaining a permit from the city/town to insure compliance with this section.

Section 2: Effective Date: This ordinance is effective on and after December 31, 2001.

Section 3: Penalty: Among other penalties that may apply, any person, firm or corporation that violates any provision of this ordinance shall be guilty of a misdemeanor. Upon conviction persons shall be punished by a fine not to exceed \_\_\_\_\_. Upon conviction, firms or corporations shall be punished by a fine not to exceed \_\_\_\_\_. Each day of violation continued shall be a separate offense, punishable as described above.

Passed and adopted by the City/Town Council of \_\_\_\_\_, Arizona,  
this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

Attested:

Approved:

\_\_\_\_\_  
City/Town Clerk

\_\_\_\_\_  
Mayor

## **APPENDIX D. SAMPLE SLIDE PRESENTATION SCRIPT**

## **SUSTAINING CLEAN AIR IN CENTRAL YAVAPAI COUNTY**

Since becoming the first capital of the Arizona territory in 1863, Prescott has been renowned for its mild four-season climate, sweeping vistas, and healthy outdoor environment. Despite significant population growth, residents of the Central Yavapai County area continue to breathe clean air - unlike many other growing communities in Arizona.

Slide 1

However, there are dark clouds on the horizon that could threaten to degrade air quality in the region, if preemptive steps are not taken. The accumulating “clouds” are forecasts that the population will continue to grow rapidly during the next twenty years. In light of this growth, sustaining clean air is a justifiable concern for the Central Yavapai County area. It is important to keep regional air quality within the national standards, both for health reasons, and to avoid the stigma, cost, and controls associated with being a Federally-designated nonattainment area.

We begin with a description of an air quality visioning process and outreach program which have been undertaken to sustain clean air in Central Yavapai County. As background information, this presentation identifies the six major air pollutants, their health effects, national trends and problems. We then focus on local issues, including the status of air quality and growth projections, followed by a discussion of potential air pollution control strategies and a Clean Air Action Plan. The presentation concludes with a list of actions that individuals can take to keep the air clean.

Slide 2

Two initial steps were taken in 1999 and 2000 to sustain clean air in Central Yavapai County: a visioning process and an educational/outreach campaign. Both of these efforts were funded by the Arizona Department of Transportation.

Slide 3

As part of the air quality visioning process, two sessions were conducted at the Prescott Valley Civic Center during the fall of 1999. Representatives of local governments, a tribal community, and a college participated in the sessions. The overarching goals of the process were to keep the air clean, preserve the high quality of life, and avoid the detrimental impacts of unhealthy air in Central Yavapai County.

Slide 4

Participants reviewed national, state and local air quality trends and learned how demographics, transportation, and public policies can impact air pollution. The group developed an air quality vision statement and identified major sources of air pollution. To preempt the impacts of future growth, the group evaluated 47 air quality control strategies and selected 19 for further consideration in Central Yavapai County. Another key product of the visioning process was a Clean Air Action Plan which identifies tasks, responsibilities and time frames for implementation.

Slide 5

The vision statement developed by the visioning process emphasizes that local governments need to be a proactive and work cooperatively to keep the air clean,

Slide 6

even as the region grows substantially over the next twenty years.

Implementation of an air quality educational/outreach campaign was one of the top priority control strategies identified during the visioning process. The “Air Aware” Campaign seeks to keep local governments and the public informed about air quality issues and control strategies. A report has been prepared to assist Central Yavapai County in implementing the “Air Aware” Campaign.

Slide 7

Being “Air Aware” requires a basic understanding of key air pollutants and their impacts on health.

Slide 8

National Ambient Air Quality Standards currently exist for six air pollutants: carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter, and sulfur dioxide. These six are also called criteria pollutants.

Slide 9

In general, the six criteria pollutants are dangerous to your health when inhaled at concentrations exceeding the national standards. One medical study reports that mortality increases by one percent for every 10 ug/m<sup>3</sup> increase in particulate matter. In addition, the Arizona Comparative Environmental Risk Project estimates that premature deaths in Arizona due to particulate matter are nearly 1,000 per year.

Slide 10

On a national level, concentrations of all criteria pollutants have declined since 1977. Sulfur dioxide levels have fallen as a result of stationary source controls, such as those placed on the Arizona copper smelters. Nitrogen dioxide concentrations have declined as a result of new car emission equipment, reformulated fuels and controls on power plants. The decreases in concentrations of the four other criteria pollutants range from 97% for lead to 12% for particulates. The major reduction in lead has occurred as a result of the use of unleaded gasoline since the late 1970's. Reductions in the other pollutants have occurred primarily due to new car emission controls and reformulated fuels. (It should be noted that the 12% reduction in particulates reflects a shorter period, 1988-1996.)

Slide 11

Because of these significant reductions in air pollution concentrations across the country, many urban areas that exceeded the standards five years ago are now in attainment. For example, the Phoenix urban area has not had an exceedance of the ozone standard since 1996 or the carbon monoxide standard since 1997. However, particulates remain a problem for Phoenix and many other areas of Arizona. In addition to Phoenix, Ajo, Bullhead City, Douglas, Hayden, Nogales, Paul Spur, Payson, Rillito and Yuma are all classified by the U.S. Environmental Protection Agency as nonattainment areas for particulate matter less than ten microns in diameter, also called PM-10.

Slide 12

The next section focuses on air quality issues specific to the Central Yavapai County area.

Slide 13

Unlike other growing areas of Arizona, such as Phoenix and Payson, the Central Yavapai County area does not currently violate the National Ambient Air Quality Standards for any pollutant. However, rapid growth over the coming decades could compromise this clean air status. Forecasts for the region suggest that the population could grow at a rate of 5% per year for another twenty years. Employment and vehicle travel are forecasted to increase at similarly high rates. Slide 14

Ozone monitoring data has been collected at the Hillside Sheriff's station since 1996. The second highest annual one-hour ozone concentrations at the Hillside monitor are typically less than 75% of the standard. Slide 15

PM-10 is the only pollutant currently monitored by the Arizona Department of Environmental Quality in the Central Yavapai County area. The monitor is located in downtown Prescott, behind the City Administration Building, just off Town Square. PM-10 monitoring data for 1996-1998 indicate that Prescott concentrations are about one-fifth of the daily standard. The Hillside monitor records PM-10 concentrations which are slightly higher, but still less than one-third of the daily standard. Slide 16

During the visioning process the key sources of air pollutants in Central Yavapai County were identified as construction sites and unpaved roads, wood-burning fireplaces and stoves, heavy duty vehicles and equipment, motor vehicles, urban sprawl and "dirty" industries. Slide 17

The dark clouds on the horizon for Central Yavapai County are the dramatic increases in population and vehicle travel expected during the next twenty years. As this graph indicates, population and travel will nearly triple. Slide 18

The cause for concern is that the growth in vehicle travel will increase emissions of carbon monoxide, hydrocarbons, nitrogen oxides and particulates. In addition, increasing the number of people and jobs in the area could lead to more emissions from wood burning fireplaces and stoves, construction activity, and industrial sources. Actions need to be taken to ensure that these emissions do not increase so drastically that the national air quality standards are violated. If this happens, the U.S. EPA could designate the area as "nonattainment," triggering extensive Federal requirements for plans and mandatory control measures to bring the area back into attainment. Slide 19

There are a number of air quality strategies already in place in Central Yavapai County to protect air quality from further degradation. One purpose of the air quality visioning process was to determine if additional strategies are necessary to offset the effects of a projected five percent annual growth rate in Central Yavapai County. Slide 20

As part of the visioning process, participants reviewed 47 control strategies which have the potential to reduce carbon monoxide, ozone precursors and particulate matter emissions. Nineteen of these were selected for further consideration in Central Yavapai County. The top seven preferred strategies are Slide 21

fugitive dust control at construction sites, clean-burning fireplaces in new construction, educational/outreach programs, mitigation bonds for dust control, stabilizing unpaved roads, cleaning up spills on paved roads, and encouraging clean industries.

A Clean Air Action Plan has been developed to ensure that the momentum to keep clean air is maintained. Several tasks in this plan are already being implemented. An Air Quality Steering Committee has been established as a subcommittee of the Central Yavapai Transportation Planning Organization. The educational/outreach program is being initiated as the “Air Aware” Campaign. This slide show represents just one dimension of the outreach program. Other “Air Aware” materials include fact sheets, website content and a report identifying how to continue the outreach campaign in Central Yavapai County. A model ordinance for clean-burning fireplaces and stoves in new construction has also been drafted for consideration by the local city, town, and tribal councils. Slide 22

Local agencies in Central Yavapai County are considering implementation of strategies to curb the future effects of growth on air quality. Individual citizens can also contribute to this effort. Slide 23

Some things that you can do to support the “Air Aware” Campaign are: Slide 24

- Keep your vehicles well-tuned
- Replace air filters regularly and keep tires properly inflated
- Carpool, take the bus, ride a bike or walk to work or school
- Avoid driving during rush hours

- Drive newer, lower-emission vehicles whenever you have a choice Slide 25
- Refuel your vehicle after 5 p.m. in the summer
- Don’t “top off” or spill fuel during refueling
- Drive 15 mph or less on unpaved roads
- Limit use of off-road vehicles
- Don’t park on unpaved parking lots or vacant lots
- Telecommute, if possible

- Mow the lawn and use other gasoline-powered equipment after 5 p.m. Slide 26
- Avoid using leaf-blowers
- Limit use of your wood-burning fireplace and use dry wood
- Upgrade to a clean-burning stove or fireplace
- Encourage your community to provide natural gas service for heating and cooking
- Encourage “clean” industries

In general, you can support the Central Yavapai County Air Aware Campaign by passing along these “What You Can Do” tips and supporting the Clean Air Action Plan developed as part of the local visioning process. If you have any questions or suggestions for the Campaign, contact the Air Aware Coordinator. Slide 27



With a little effort we can continue to keep our air clean for generations to come!

Be “Air Aware!” For further information, check out the ADOT “Air Aware” **Slide 28** web site at [www.dot.state.az.us/about/air/index.htm](http://www.dot.state.az.us/about/air/index.htm), or contact your AIR AWARE Coordinator.