

**Limited Maintenance Plan
and Request for Redesignation to Attainment
for the Northern Ada County
Carbon Monoxide Not-Classified Nonattainment Area**

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- G-1 APA REPORT: "1997 DEMOGRAPHIC REPORT FOR ADA AND CANYON COUNTIES", APA REPORT NO. 09-97, JUNE 1997.
- G-2 EPA MEMORANDUM: "PROCEDURES FOR PROCESSING REQUESTS TO REDESIGNATE AREAS TO ATTAINMENT", SEPTEMBER 4, 1992 FROM JOHN CALCAGNI, DIRECTOR OF AIR QUALITY MANAGEMENT DIVISION.
- G-3 EPA MEMORANDUM: "OZONE AND CARBON MONOXIDE DESIGN VALUE CALCULATIONS", JUNE 18, 1990 FROM WILLIAM G. LAXTON, DIRECTOR TECHNICAL SUPPORT DIVISION.
- G-4 EPA MEMORANDUM: "LIMITED MAINTENANCE PLAN OPTION FOR NONCLASSIFIABLE CO NONATTAINMENT AREAS", OCTOBER 6, 1995 FROM JOSEPH W. PAISIE, GROUP LEADER INTEGRATED POLICY AND STRATEGIES GROUP.
- G-5 WOLYN, PAUL G., AND MCKEE, THOMAS B. 1989. "DEEP STABLE LAYERS IN THE INTERMOUNTAIN WESTERN UNITED STATES." *MONTHLY WEATHER REVIEW* 117: 461-47.
- G-6 ADA PLANNING ASSOCIATION DESIGNATED AS LEAD AGENCY FOR CARBON MONOXIDE SIP:
 - RESOLUTION 2-78
 - FEB. 3, 1978 LETTER – APA TO DIVISION OF ENVIRONMENT
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LIST OF ACRONYMS AND TERMS

ACHD	Ada County Highway District	lb	Pound - standard measurement of weight
AIRS	Aerometric Information Retrieval System	LSL	Lower Stable Layer
AP-42	EPA's current edition of air pollution emissions factors	MOBILE5b	EPA's computer program for compiling emissions from mobile sources
AQB	Air Quality Board; agency that administers the vehicle emissions testing program in Ada County	MPO	Metropolitan Planning Organization
AQIP	Air Quality Improvement Plan	MSA	Metropolitan Statistical Area
CAA	Clean Air Act	NAA	Nonattainment Area
CARB	California Air Resources Board	NAAQS	National Ambient Air Quality Standards
CFR	Code of Federal Regulations	NDIR	Non-Dispersive Infra-Red Photometry
CO	Carbon Monoxide	NEVES	Nonroad Engine and Vehicle Emissions Study - conducted by EPA
COMPASS	Community Planning Association; metropolitan planning organization for Ada County	NSR	New Source Review
DEQ	Idaho Department of Environmental Quality	P & Z	Planning and Zoning
DOT	Department of Transportation	ppm	Parts per million
DSL	Deep Stable Layer	PM ₁₀	Particulate matter 10 microns or less in diameter
EI	Emission Inventory	PSD	Prevention of Significant Deterioration
EPA	Environmental Protection Agency	QA	Quality assurance
FHWA	Federal Highway Administration	QC	Quality control
ICC	Interagency Consultation Committee on transportation conformity	SIP	State Implementation Plan
I/M	Vehicle inspection and maintenance program	TCM	Transportation Control Measures
IDAPA	Idaho Administrative Procedures Act, contains Idaho's state rules for the control of air pollution	TMAC	Transportation Model Advisory Committee
ISTEA	International Surface Transportation Efficiency Act of 1991	TON	Weight of 2,000 pounds (LB)
ITD	Idaho Transportation Department	Tonne	Weight of 1,000 kilograms (KG); equivalent to 2,204.59 LB
KG	Kilogram - metric measurement of weight	TP+	Travel forecast model
		tpy	Tons per year
		VMT	Vehicle miles traveled
		Winter	Defined as Nov, Dec, Jan & Feb for this SIP

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Executive Summary

This Carbon Monoxide Limited Maintenance Plan was prepared to meet U.S. Environmental Protection Agency (EPA) requirements to support redesignation of the Northern Ada County not-classified carbon monoxide Nonattainment Area to Attainment status. Northern Ada County, Idaho was designated as a Nonattainment Area for carbon monoxide in 1978. An Air Quality Improvement Plan (AQIP) was submitted to EPA in 1980, and again in 1984. The current AQIP is a minor revision of the 1984 Plan, submitted in 1994. Given reductions in the ambient carbon monoxide concentrations and the absence of any exceedances of the standards in almost a decade, the State of Idaho is now submitting a Limited Air Quality Maintenance Plan, and requesting redesignation to attainment.

The Northern Ada County not-classified carbon monoxide Nonattainment Area consists of that portion of Ada County that is north of the Boise baseline (43 degrees North latitude). Areas to the north, east, and south of the Nonattainment Area are either unpopulated or are separated from the Nonattainment Area by natural barriers. Canyon County, to the west of the Nonattainment Area, is populated and has significant sources of carbon monoxide. Although it is in the same airshed, its contributions to carbon monoxide levels in the Northern Ada County Nonattainment Area are considered negligible due to the distance involved and the ready dispersion of carbon monoxide. However, Canyon County does contain a single major point source that is located within the 25-mile radius of Ada County, and is, therefore, included in the Ada County analysis.

The Idaho Department of Environmental Quality (DEQ) operates a permanent carbon monoxide gas analyzer in downtown Boise. Saturation studies have shown that this site consistently records the highest carbon monoxide concentrations. A steady downward trend in carbon monoxide concentrations has been measured in Ada County, despite tremendous growth in the region. Only one exceedance of the eight-hour National Ambient Air Quality Standard (NAAQS) has been recorded since 1986. This was recorded in January of 1991.

Northern Ada County qualifies to submit a less rigorous Limited Maintenance Plan because the design value (the second highest eight-hour carbon monoxide concentration measured in 8 consecutive quarters), based on the years 1995 and 1996, remains below 7.65 parts per million (ppm), or 85% of the standard. Carbon monoxide levels since 1996 have continued to decline.

Although extended temperature inversions and stagnant air masses have been found to be important in the buildup of particulate matter air pollution, meteorology does not play the same role in carbon monoxide accumulation. The critical factor in higher carbon monoxide concentrations appears to be vehicle emissions, with nearly all elevated concentrations coinciding with rush-hour or high traffic periods. The area has seen its highest carbon monoxide levels when rush-hour traffic coincided with short-term, lower level temperature inversions. Winter, defined as the months between November and February, is generally the time when higher carbon monoxide concentrations are measured. This is due to the colder ambient

temperature and higher frequency of minor inversions during these months. The bowl shaped topography of the region also presents a barrier to movement of air in the Ada County area, contributing to the potential for accumulation.

The primary source of carbon monoxide emissions in Ada County is incomplete combustion of gasoline by motor vehicles, accounting for an estimated 69% of annual emissions, and 75% of winter emissions in 1995. Wood burning, outdoor burning, lawn and garden equipment (summer only), industry, and other types of fossil fuel burning equipment make up the majority of the rest of the carbon monoxide emissions in this area.

Motor vehicle tailpipe emissions have been reduced through measures such as the Ada County Vehicle Inspection and Maintenance Program, federal new vehicle emissions standards, efforts to increase alternative transportation options, and improvements in traffic flow in downtown Boise. Wood burning and outdoor burning controls, designed to address particulate matter problems, have also had some impact on carbon monoxide emissions.

Although a maintenance demonstration showing that there is no likelihood of exceeding the carbon monoxide NAAQS in the future is not required under the Limited Maintenance Plan option, several other components are required.

Contingency measures, designed to ensure that no violations of the NAAQS are allowed to develop, will be triggered if carbon monoxide monitors measure a single exceedance of the NAAQS, or if concentrations of 8.0 ppm are measured on four or more days within a single winter season. If triggered, all motor vehicle fuels dispensed within the Nonattainment Area must contain a minimum of 10% ethanol. This Plan also leaves open the option to negotiate a different measure with EPA, should another, more effective, option be identified.

Demonstration of compliance with transportation conformity requirements will be carried out by an Interagency Consultation Committee (ICC), which is overseen by the Community Planning Association of Southwest Idaho (COMPASS), the local Metropolitan Planning Organization (MPO). With no applicable carbon monoxide emissions budget required, analyses will be based on the Build/No-Build test. Analyses of hot-spots and regionally significant projects will also be conducted.

The federal agency overseeing any activities subject to general conformity requirements will be responsible for working with DEQ to determine the level of analysis required, conducting any conformity analyses, and developing any required mitigation.

I. Introduction

Northern Ada County, Idaho is currently designated as a Not-Classified Nonattainment Area for carbon monoxide. The State of Idaho is requesting redesignation to attainment under Section 107(d) of the Clean Air Act (CAA). Ada County has not measured any exceedances of the carbon monoxide NAAQS since 1991.

In accordance with Section 175A of the Clean Air Act, additions are made herein to the carbon monoxide State Implementation Plan (SIP) to demonstrate that Northern Ada County has achieved the NAAQS, and can maintain the standard through the year 2010. These additions are hereafter referred to as the “*Northern Ada County Carbon Monoxide Limited Maintenance Plan*”, which contains the maintenance provisions of the carbon monoxide SIP.

A. The Treasure Valley

The Northern Ada County Nonattainment Area is situated in southwest Idaho within the Treasure Valley, which is located in a shallow basin. The valley encompasses both Ada and Canyon Counties and contains approximately 1600 square miles. The Boise Front, a mountain range, approximately 6,000 feet (1.8 km) high extends generally east-west, and creates a barrier to air flow on the northern edge of the valley. To the south, the Owyhee Mountain Range presents a further barrier to air flow.

The average elevation across the valley is approximately 2500 feet above sea level. The Snake River creates the southern boundary for both counties, while the Boise River flows across the valley and through the City of Boise to join the Snake River further west.

In general, Treasure Valley weather may be described as dry and temperate. The Treasure Valley area receives approximately 11 to 12 inches of precipitation annually. Once semi-arid, the entire area is now irrigated from upstream reservoirs. Hot spells during the summer rarely last more than a few days. Relatively mild winters are usually tempered by periods of cloudy or stormy weather. Temperature inversions, which result in poor air dispersion, are common in the winter season, particularly in late December and early January. The average wind is predominantly from the southeast, but is also frequently from the northwest. Wind speeds are frequently greater than 7 miles an hour.

In 1995, the population of the valley was about 360,000. The Treasure Valley has a diverse economic base that includes electronics, services, state government and agricultural products and processing. The Treasure Valley area is home to several national and multinational corporations, such as Hewlett Packard Company, Micron Technology, Boise Cascade, J.R. Simplot Company, and Albertson's Incorporated. Canyon County has a larger agricultural base while Ada County has a larger workforce in the high-tech industry.

B. The Northern Ada County Nonattainment Area

The Nonattainment Area consists of only that portion of Ada County that is north of the Boise baseline (43 degrees North latitude).

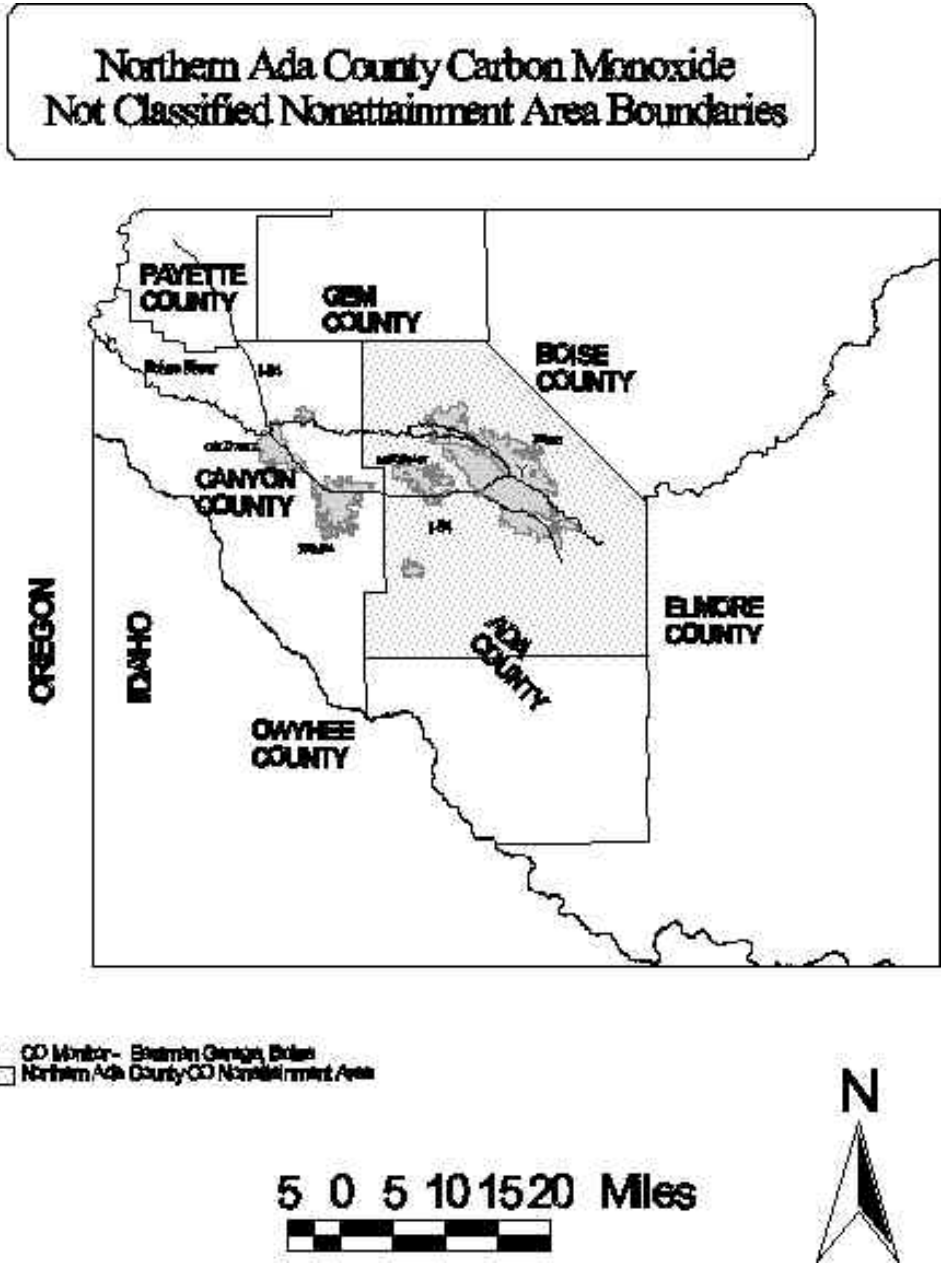
South of the baseline the land is largely unpopulated and is primarily managed by federal agencies such as the Bureau of Land Management and the Idaho National Guard.

To the east and north, the Boise Front blocks movement of air and pollution between Ada County and neighboring Boise, Elmore, and Gem Counties.

Canyon County is on the western edge of the Nonattainment Area. Canyon County is populated and has significant sources of carbon monoxide. Although it is in the same airshed, its contributions to carbon monoxide levels in the Northern Ada County Nonattainment Area are considered negligible due to the distance involved and the ready dispersion of carbon monoxide. However, Canyon County does contain a single major point source that is located within the 25-mile radius of Ada County, and is, therefore, included in the Ada County analysis.

Although not required, DEQ has completed a separate analysis of carbon monoxide emissions from Canyon County for planning purposes. This emissions inventory is included as an appendix to this document for information purposes only. A map, showing Ada and Canyon Counties, city limits within each county, and the Northern Ada County Nonattainment Area boundaries, is displayed in **Figure I**.

Figure I. Map of Ada and Canyon Counties, Northern Ada County Nonattainment Area Boundaries



C. Carbon Monoxide

Carbon monoxide is a product of incomplete combustion of compounds that contain carbon, such as wood or fossil fuels. Carbon monoxide reduces the ability of the blood to carry oxygen to vital tissues, affecting the cardiovascular and nervous systems.

The NAAQS for carbon monoxide is set at 35 parts per million (ppm) for a one-hour average concentration, and 9 ppm for non-overlapping eight hour average concentrations. Measurements are rounded to the nearest whole number. These limits may not to be exceeded more than once per year (40 CFR 50.8).

D. Nature of Problem and Sources of Carbon Monoxide in Ada County

The primary source of carbon monoxide emissions in Ada County is incomplete combustion of gasoline by motor vehicles, accounting for an estimated 69% of annual emissions and 75% of winter emissions in 1995. Wood burning, outdoor burning, lawn and garden equipment (summer only), industry, and other types of fossil fuel burning equipment make up the majority of the rest of the carbon monoxide emissions in this area.

The driving factor in higher carbon monoxide concentrations appears to be vehicle emissions, with nearly all elevated concentrations coinciding with rush-hour or high traffic periods. The area has seen its highest carbon monoxide levels when rush-hour traffic coincided with short-term, lower level temperature inversions.

Although extended temperature inversions and stagnant air masses have been found to be important in the buildup of particulate matter air pollution, meteorology does not play the same role in carbon monoxide accumulation. However, the presence of short-term temperature inversions, when coupled with high emissions periods, can contribute to the accumulation of carbon monoxide, as demonstrated in Section V.C. of this document and Appendix D.

Winter, defined as the months between November and February, is generally the time when higher carbon monoxide concentrations are measured. This is due to the colder ambient temperature and higher frequency of minor inversions during these months. Therefore, winter is known as the “carbon monoxide season”. The bowl shaped topography of the region also presents a barrier to movement of air in the Ada County area, contributing to the potential for accumulation.

E. Carbon Monoxide Levels in Ada County

There are no recorded carbon monoxide measurements in Ada County that exceed the 1-hour NAAQS. However, the eight-hour carbon monoxide NAAQS has been violated in the past. Based on these violations, the northern portion of Ada County was designated a Nonattainment

Area for carbon monoxide in 1978. At that time, exceedances of the eight-hour carbon monoxide NAAQS were measured up to 80 days per year, with eight-hour average concentrations reaching as high as 20.4 ppm. Section 186 of the Clean Air Act, as amended in 1990, established a classification as to the degree of nonattainment. However, no sub-classification was given to Northern Ada County, so the area is currently designated a “Not-Classified” Nonattainment Area for carbon monoxide.

Carbon monoxide levels in Ada County have dropped since the 1970's. Only one exceedance of the eight-hour standard has been recorded since 1986. This was recorded in January of 1991. No violations (more than one exceedance of the standard in a single year) have been recorded since 1986.

The Ada County Vehicle Inspection and Maintenance Program, along with numerous gradual changes to the federal standards for new vehicle emissions have radically decreased motor vehicle tailpipe emissions. Efforts to increase alternative transportation options, as well as improvements in traffic flow in downtown Boise, have reduced congestion and eliminated opportunities for pollution to build up in “hotspot” areas.

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II. Compliance with Clean Air Act Requirements, Basis for Redesignation Request and Maintenance Plan

This section summarizes the justification for submitting a Limited Maintenance Plan and outlines the Clean Air Act requirements for both redesignation and the contents of the Maintenance Plan.

A. Qualification to Submit a Limited Maintenance Plan

The qualifications necessary to submit a Limited Maintenance Plan are outlined in an EPA memorandum as follows:

“Nonclassifiable CO Nonattainment Areas seeking redesignation to attainment whose design values are at or below 7.65 ppm (85% of exceedance levels of the CO NAAQS) at the time of redesignation may choose to submit a less rigorous maintenance plan than was formerly required. This new option is being termed a limited maintenance plan.”

(EPA memorandum dated October 6, 1995 from Joseph W. Paisie, Group Leader Integrated Policy and Strategies Group. See *Appendix G. References*).

The method for calculating design values is presented in the June 18, 1990 memorandum from EPA, “Ozone and Carbon Monoxide Design Value Calculations”, from William G. Laxton, former director of the OAQPS Technical Support Division to Regional Air Directors (see *Appendix G. References*). Design value is based on the second highest non-overlapping running eight-hour ambient carbon monoxide concentrations measured in eight consecutive quarters (two years of data). For this Maintenance Plan, eight consecutive quarters, covering all of 1995 and 1996, were selected. These years are representative of current emissions levels. These years also had meteorological conditions that are representative of conditions that caused elevated concentrations of carbon monoxide in previous years.

The design value calculation was based on data from the downtown Boise carbon monoxide monitor, which has been determined to be the location with the highest measured concentrations of carbon monoxide. As shown in Table I, the maximum and second highest non-overlapping running eight-hour concentrations measured in Ada County were 8.1 and 7.4 ppm in 1995, and 5.0 and 4.9 ppm in 1996. Based on this data, the design value for Ada County for these years is 7.4 ppm (the second highest measured concentration for these eight quarters). This value is below the cutoff point to qualify for the Limited Maintenance Plan option. Therefore, the Northern Ada County Nonattainment Area qualifies for the Limited Maintenance Plan option.

Table I Design Value Calculation

	Measured Value (ppm)	
Year	Maximum	Second Highest
1995	8.1	7.4
1996	5.0	4.9

B. Requirements For Redesignation

Section 107(d)(3)(E) sets five criteria that must be met prior to redesignation to attainment.

- 1. The EPA must determine that the NAAQS have been attained, as required by Section 107(d)(3)(E)(i) of the CAA.***

Documentation of the attainment of the NAAQS is presented in Section III of this document.

- 2. The applicable Implementation Plan must be fully approved by EPA under Section 110(k), as required by Section 107(d)(3)(E)(ii) of the CAA.***

A summary of the approved Northern Ada County carbon monoxide AQIPs is provided in Section IV of this document.

- 3. Section 107(d)(3)(E)(iii) of the CAA requires that states document that improvements to air quality are due to permanent and enforceable emissions reductions.***

Verification of Air Quality Improvements is addressed in Section V of this document.

- 4. Section 107(d)(3)(E)(iv) of the CAA requires that states must have a fully approved Maintenance Plan that meets the requirements of Section 175(A) relating to Contingency Measures.***

The complete Maintenance Plan is provided in Section VI of this document, and is being submitted concurrently with the redesignation request, as provided in an EPA memorandum:

“A state may submit both the redesignation request and the maintenance plan at the same time and rulemaking on both may proceed on a parallel track.”

(Memorandum from EPA, John Calcagni, Director of Air Quality Management Division, September 4, 1992. See *Appendix G. References*)

- 5. Section 107(d)(3)(E)(v) of the CAA requires that the provisions of Section 110 and Part D of the Act be met within the area to be redesignated.***

Section 110

Section 110 requires that the maintenance SIP be adopted by the state after holding a public hearing on the Plan. The State of Idaho followed all required public involvement processes, as documented in *Appendix H. Public Comment, Public Hearing, and*

Response. Documentation showing that the state formally adopted this Plan is included in the attached letter of submittal.

Section 110(a)(2) contains general requirements for Nonattainment plans, including;

- 110(a)(2)(A) *Include enforceable emissions limits and other measures.*

This requirement is addressed in Section V.A. of this document.

- 110(a)(2)(B) *Monitor, compile, and analyze ambient air quality data, and make such data available to EPA upon request.*

This requirement is addressed in Section III of this document.

- 110(a)(2)(C) *Include a program for enforcing the emissions limitations and other control measures.*

The state's authority to enforce emissions control measures is addressed in Section V of this document.

- 110(a)(2)(D) *Contain adequate provisions to prevent emissions for the Nonattainment Area from impacting another state by significantly contributing to Nonattainment or interfering with the maintenance of the NAAQS, or interfering with PSD measures.*

Current scientific understanding is that carbon monoxide disperses readily and that transport across large distances is not a significant factor. The edge of Ada County is more than 20 miles from Oregon, the closest nearby state. The state submits that no additional provisions are necessary to prevent inter-state transport.

- 110(a)(2)(E) *Provide assurance that the state has adequate personnel, funding and authority to implement and enforce the SIP and associated regulations.*

Although DEQ is funded on a year-to-year basis, DEQ anticipates that adequate personnel and funding will be in place to implement and enforce the Limited Maintenance Plan and associated regulations.

Information about authorities necessary to implement and enforce the Limited Maintenance Plan and associated regulations can be found in Section V of this document.

- 110(a)(2)(F) *Require stationary sources to install, maintain, operate, and replace any equipment necessary to monitor the source's regulated emissions.*

The requirement for stationary sources to install, maintain, operate, and replace equipment necessary to monitor the source's regulated emissions is specifically stated as a condition of each air quality permit issued by DEQ.

In addition, sources must comply with State Air Quality Rulesⁱ which state that stationary sources must show that the source will comply with all emissions standards, that the source will not cause or significantly contribute to a violation of the NAAQS, and that major facilities use Best Available Control Technology.

- 110(a)(2)(G) *Provide for emergency powers of authority and adequate contingency plans to implement the authority.*

The state has the authorityⁱⁱ to implement controls in response to air pollution forecasts, alerts, warnings, and emergency episodes.

- 110(a)(2)(H) *Provide for revision of SIP as necessary.*

This requirement is addressed in Section VI.

- 110(a)(2)(I) *Meet the applicable requirements of Part D.*

See below under "Part D".

- 110(a)(2)(J) *Meet the applicable requirements of 121 (consultation), 127 (public notification), and Part C (PSD).*

Consultation with general purpose local government is addressed below under 110(a)(2)(M).

The Rules for the Control of Air Pollution in Idaho establishes the requirements for public notification regarding atmospheric stagnation or degraded air quality.ⁱⁱⁱ The Rules for the Control of Air Pollution in Idaho also establishes the requirement for a public comment period before permits are issued.^{iv} The public is also given opportunity to comment on any carbon monoxide conformity analyses, as described in Section VI.F.

DEQ also voluntarily operates an Air Quality Report that provides information about air pollution levels across the Treasure Valley on a daily basis. This report is updated each business day, and on weekends and holidays if conditions warrant. Information is reported on a webpage and on a telephone hotline. When Air Quality Index levels exceed 60 for any measured pollutant and meteorology indicates potential for additional

accumulation, DEQ may issue voluntary or mandatory bans on open and residential wood burning. If bans are issued, DEQ faxes the information to local governments, media, law, and fire departments.

PSD requirements are addressed below under Part D.

- 110(a)(2)(K) *Provide for modeling sufficient to predict the effect on ambient air quality of emissions of the relevant criteria pollutant or its precursors.*

This is not required under the limited option;

“The maintenance demonstration requirement is considered to be satisfied for nonclassifiable areas if the monitoring data show that the area is meeting the air quality criteria for limited maintenance areas.”

(EPA memorandum dated October 6, 1995 from Joseph W. Paisie, Group Leader Integrated Policy and Strategies Group. (see *Appendix G. References*))

- 110(a)(2)(L) *Require sources seeking operating permits required by Title V to pay the appropriate application and other permit fees.*

The state has historically required permit fees. Idaho Code § 39-115 of the Environmental Protection and Health Act grants DEQ the authority to collect fees for air pollution source permits, including Title V sources. See also IDAPA 58.01.01.525 through 538. The Rules for the Control of Air Pollution in Idaho^v specifies how permit fees are assessed, and to whom they will be applied.

- 110(a)(2)(M) *Provide for consultation and participation by local governments.*

In accordance with a 1995 Memorandum of Understanding and a 1999 Sub-Memorandum of Understanding (see *Appendix G. References*), COMPASS, the local MPO, was a key participant in the development of this *Maintenance Plan* and all supporting documents, including the *1995 Carbon Monoxide Emissions Inventory*.

In September 1999 DEQ also established a Multi-Agency Airshed Group. This group, made up of all local agencies and government partners that might be impacted by local air quality planning, meets quarterly to learn about and discuss local air quality issues and provide input on DEQ air quality planning efforts. There are currently 33 members representing various local, state, and federal agencies or organizations in this group. The development of this *Carbon Monoxide Maintenance Plan* was among the many topics covered at these meetings. Group members were given the opportunity to review and provide input on draft and final versions of this document and all supporting documents, including the *1995 Carbon Monoxide Emissions Inventory*.

Part D

Section 110, Part D establishes general requirements applicable to all areas that are designated Nonattainment. Because the Northern Ada County Nonattainment Area was designated as a “not-classified” carbon monoxide Nonattainment Area under Section 186, the area is only subject to the provisions of subpart 1.

“If an area was not classified under section 181 for O₃, or section 186 for CO, then that area is only subject to the provisions of subpart 1, “Nonattainment Areas in General.””

(Memorandum from EPA, John Calcagni, Director of Air Quality Management Division, September 4, 1992. See *Appendix G. References*)

Subpart 1 of Part D states that the area must:

- *Meet Section 172(c) general requirements for Nonattainment plans to achieve attainment by the required date.*

According to an EPA memorandum, this Plan must address only PSD requirements, which are described in Section V.

“The EPA anticipates that areas will already have met most or all of these requirements to the extent that they are not superseded by more specific Part D requirements. The requirements for reasonable further progress, identification of certain emissions increases, and other measures needed for attainment will not apply for redesignations because they only have meaning for areas not attaining the standard. The requirements for an emissions inventory will be satisfied by the inventory requirements of the maintenance plan. The requirements of the Part D new source review program will be replaced by the prevention of significant deterioration (PSD) program once the area has been redesignated. However, in order to ensure that the PSD program will become fully effective immediately upon redesignation, either the State must be delegated the Federal PSD program, or the State must make any needed modifications to its rules to have the approved PSD program apply to the affected area upon redesignation.” (Underline added)

(Memorandum from EPA, John Calcagni, Director of Air Quality Management Division, September 4, 1992. See *Appendix G. References*).

- *Meet Section 173 requirements to implement adequate provisions to meet general NSR program requirements.*

Documentation of controls on stationary sources is presented in Section V of this document.

- *Meet Section 174 requirements that state and local governments adopt a planning procedure that designates which elements of the SIP each entity is responsible for.*

A 1995 Memorandum of Understanding and a 1999 Sub-Memorandum of Understanding (see *Appendix G. References*) clearly establish a cooperative working agreement and designate the various roles and requirements of DEQ and COMPASS for the purpose of developing this *Carbon Monoxide Maintenance Plan*. In summary, COMPASS agreed to provide demographic and on-road mobile data and estimates, facilitate contacts with other local government entities, provide the on-road mobile emissions modeling, and analyze control strategy options relating to the vehicle emissions testing program. DEQ agreed to prepare the technical analyses and documentation, and adopt and submit the necessary documentation to EPA.

No new control strategies are introduced in this Maintenance Plan. Government agencies responsible for enforcing existing control strategies specified in the previous *Carbon Monoxide State Implementation Plan* are detailed in Section V of this document.

- *Meet Section 176(c)(4) requirements to develop transportation/air quality conformity procedures that are consistent with federal conformity regulations.*

The Idaho Transportation Conformity Rule ^{vi} was finalized on April 12, 2001. This rule adopts by reference portions of 40 CFR Part 93, Subpart A Section 100-129. Section VI.F. of this document summarizes the conformity processes.

C. Requirements For Maintenance Plans

A Maintenance Plan describes how an area will maintain federal standards for at least ten years after redesignation. The September 4, 1992 EPA memorandum from John Calcagni, Director, Air Quality Management Division (see *Appendix G. References*) outlines the specific provisions that must be included in a Maintenance Plan in order for it to be approvable. The October 6, 1995 EPA memorandum from Joseph W. Paisie (see *Appendix G. References*) provides information about the modified requirements under the Limited Maintenance Plan option.

The requirements for Limited Maintenance Plans are significantly reduced. The maintenance demonstration requirement is considered to be satisfied, and the emissions budget may be treated as essentially not constraining for the length of the maintenance period. As a result, there is no requirement to project emissions over the maintenance period. Also, because the emissions budget is considered to be unconstrained, actions subject to the general or transportation conformity rules would be considered to satisfy the budget test.

The following list summarizes the requirements for a Limited Maintenance Plan. The complete *Northern Ada County Limited Maintenance Plan* is included in Section VI of this document.

- 1. Emissions Inventory: An attainment year emissions inventory based on actual “typical carbon monoxide season” emissions, that has undergone a public hearing, and reflects the period associated with the monitoring data that shows attainment. Estimations of future year emissions are not required.***

The 1995 Carbon Monoxide Emissions Inventory is described in Section VI.A. The complete document is included in *Appendix A. Carbon Monoxide Emissions Inventories*. All public involvement processes were adhered to, as documented in *Appendix H. Public Comment, Public Hearing, and Response*.

- 2. Maintenance Demonstration: not required under the Limited Maintenance Plan option.***

EPA guidance states that, in areas that qualify for the Limited Maintenance Plan option, it is unlikely that an area will experience a violation of the carbon monoxide NAAQS, and existing control measures should provide adequate assurance of maintenance of the air quality standards.

- 3. Monitoring Network: Provisions for continued operation of the air quality monitoring network to provide verification of future compliance with NAAQS.***

Saturation studies, showing that the current carbon monoxide monitoring site represents the area of highest carbon monoxide concentrations, are described in Section III.C. The complete saturation study documents are included in *Appendix C-2 and C-3*. DEQ’s commitment to continue to operate an adequate carbon monoxide monitoring network is described in Section VI.C.

- 4. Verification of Continued Attainment: Verification of continued attainment, including legal authority to implement and enforce all measures included in the Maintenance Plan, and a method to track the progress of the Maintenance Plan.***

No new control measures are recommended in this *Limited Maintenance Plan*. A discussion of existing measures, including evidence of the state’s legal authority to implement and enforce them, is included in Section V.A.

A description of the methods to track the progress of the Plan is included in Section VI.

- 5. Contingency Plan: A contingency plan identifying specific measures to promptly correct any violation of the NAAQS, and provide a schedule and procedure for adoption and implementation of the measures. The state should also identify a***

specific time limit for action by the state, and specific indicators, or triggers, that will be used to determine when the contingency measures should be implemented.

A description of the contingency plan, including information about their implementation and specific triggers, is included in Section VI.E.

6. Conformity Determination: Emissions budgets in limited maintenance plan areas are not constrained. Therefore, Federal actions requiring conformity determinations are considered to satisfy the emissions budget test. Other requirements of the conformity process should be addressed.

A description of the conformity process for Ada County, including information about analysis of hot-spots and regionally significant projects, is included in Section VI.F.

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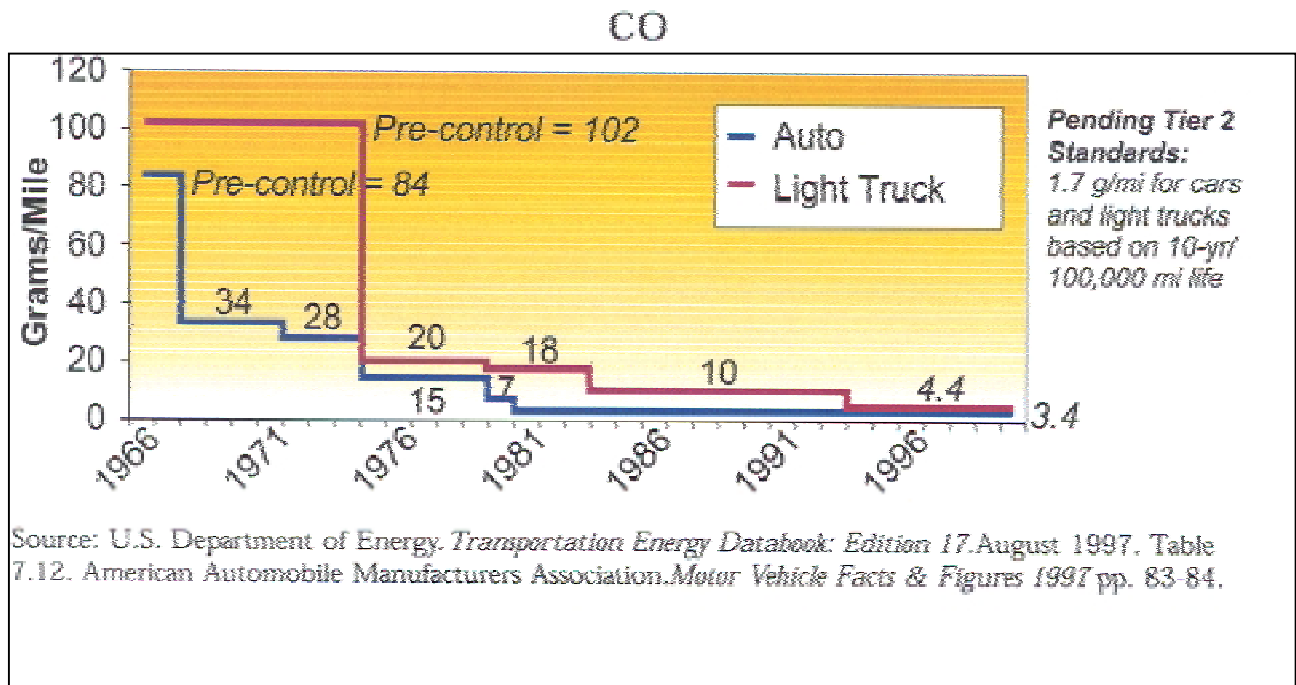
III. Demonstration of Attainment of the NAAQS

A. Trends in Carbon Monoxide Concentrations

The NAAQS for carbon monoxide is set at 35 ppm for a one-hour average concentration, and 9 ppm for non-overlapping eight hour average concentrations. Measurements are rounded to the nearest whole number.

Monitoring data since the mid-70's shows a steady downward trend in the concentration of carbon monoxide. This trend is attributed to the effects of the Ada County vehicle emissions testing program and federal standards for emissions in new vehicles. **Figure II** shows the change in federal carbon monoxide emissions standards for new vehicles.

Figure II. Change in Federal Carbon Monoxide Emissions Standards for New Vehicles



Although the area has never measured an exceedance of the one-hour carbon monoxide NAAQS, violations of the eight-hour NAAQS were frequent in the 1970's and early 1980's. However, since 1986, only one exceedance of the NAAQS has been measured, recorded in January 1991. Monitored eight-hour average carbon monoxide levels have dropped from the highest recorded value of 20.4 ppm in 1978, to 3.2 ppm, the highest recorded eight-hour average in 2000.

Figures III and IV, based on quality assured monitoring data collected by DEQ, provide additional information on attainment of the federal standard and the general decline in carbon monoxide concentrations in the area. **Figure III** shows the maximum and second highest measured eight-hour average concentrations of carbon monoxide in downtown Boise since 1977. **Figure IV** provides a comparison of the average of yearly maximum eight-hour average concentrations of carbon monoxide in downtown Boise in the late 1970's, 1980's, and 1990's.

Figure III. Highest and Second Highest Eight-Hour Average Carbon Monoxide Concentrations - Downtown Boise (Source: DEQ Monitoring Data)

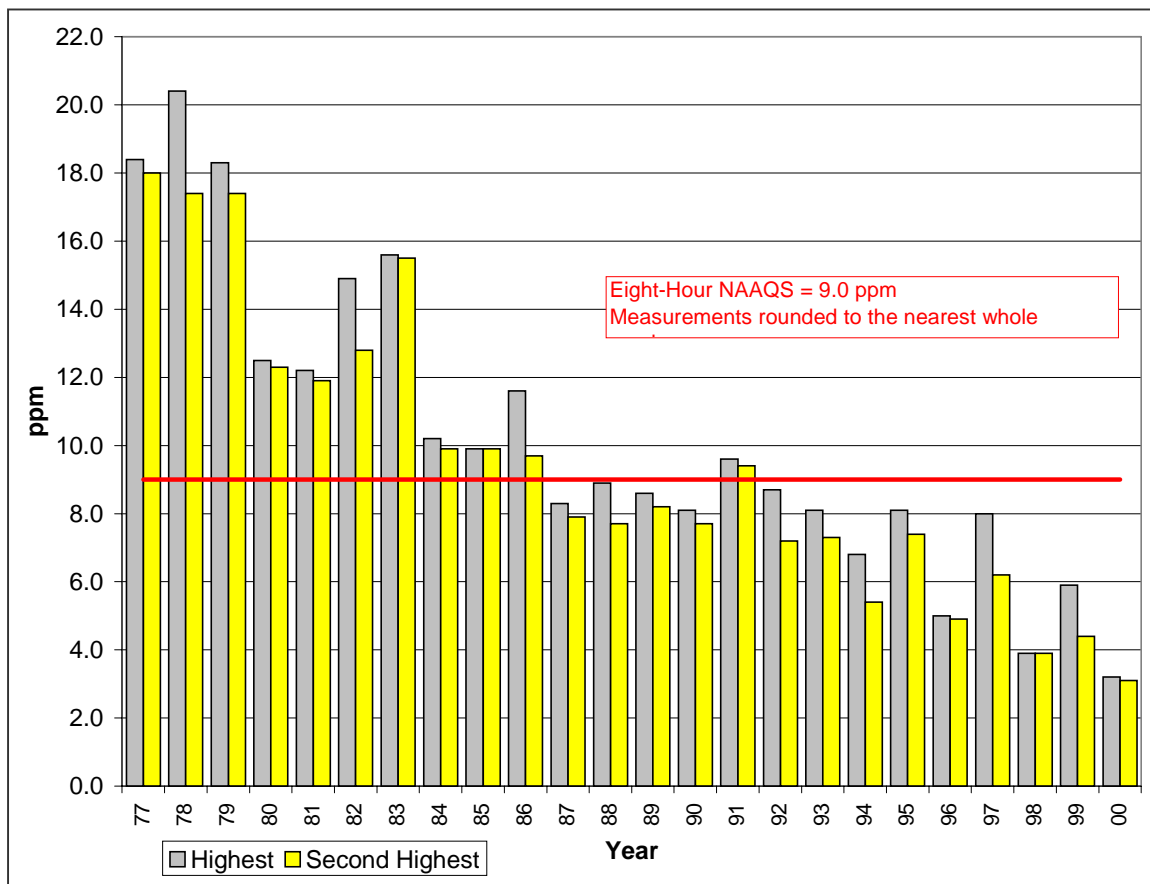
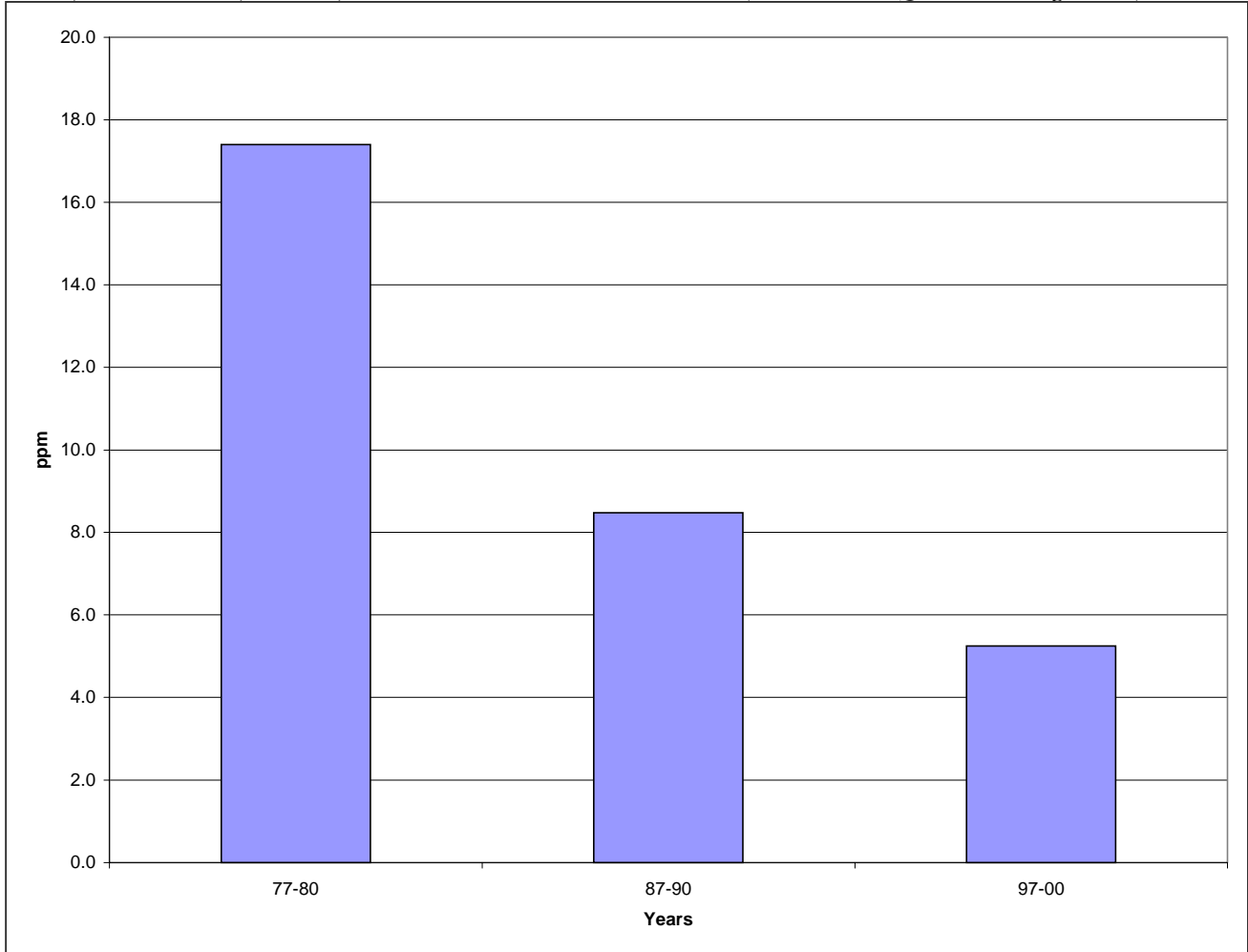


Figure IV. Average of Highest Eight-Hour Average Carbon Monoxide Concentrations per Year; Late 1970's, 1980's, and 1990's - Downtown Boise (Source: DEQ Monitoring Data)



B. Monitored Attainment

An area may be considered to have attained the carbon monoxide NAAQS if eight consecutive quarters of monitoring data show no violations of the standard, according to Section 107(d)(3)(e)(I) of the Clean Air Act and the September 4th, 1992 EPA memorandum from John Calcagni. (see *Appendix G. References*).

The Northern Ada County redesignation request is based on an analysis of carbon monoxide monitoring data that has been quality assured, and has been entered into EPA's Aerometric Information Retrieval System (AIRS). This data shows that the last violation of the standard (more than one exceedance of the standard in a single year) occurred in 1986. The last exceedance of the carbon monoxide NAAQS occurred in January of 1991.

The eight consecutive quarters to be used for this demonstration include all of 1995 and 1996. These years were selected because they had representative meteorological conditions and emissions levels. The maximum and second highest non-overlapping running eight-hour carbon monoxide concentrations measured during these quarters were 8.1 and 7.4 ppm in 1995, and 5.0 and 4.9 ppm in 1996.

C. Monitoring Network

1. Current Monitoring Network

DEQ operates a permanent, continuous gas analyzer that measures carbon monoxide concentration by non-dispersive infra-red photometry (NDIR). The monitor has been in the same downtown Boise area since 1977. It is currently located in the Eastman Parking Garage, 166 North Ninth Street, where it has been since 1993. Between 1977 and 1993, the monitor was located within 100 feet of its current position at 115 North Ninth Street. A map showing the location of the monitor within the Nonattainment Area is included on page 5.

The monitor siting, operation and quality assurance procedures are conducted in accordance with 40 CFR 58 and state standard operating procedures. All monitoring data is reported to AIRS. EPA requires at least 75% data capture during the years used in the attainment demonstration. For the 1995-1996 period, data capture at the downtown Boise carbon monoxide monitor exceeded 99% for each calendar quarter.

2. Adequacy of Monitoring Network

During the 1991-92 winter season, studies were conducted to determine if the permanent carbon monoxide monitor site is representative of maximum concentrations. A second study was conducted in the 1995-96 winter season to determine whether elevated carbon monoxide concentrations are a regional phenomenon.

Using portable carbon monoxide samplers to take eight-hour samples of ambient air at various locations around Boise and the Treasure Valley, the studies determined that the permanent carbon monoxide monitoring site consistently measures the highest concentrations of carbon monoxide in the area. No exceedances of the NAAQS were recorded during either study.

During the 1991-1992 study, the highest concentration was measured on December 17th, 1991. A value of 7.9 ppm was recorded by portable samplers collocated with the permanent site on Ninth Street. A summary of the results of the saturation studies can be found in *Appendix C-2* and *C-3*.

IV. Summary and Approval Status of SIP

For an area to be redesignated to attainment, the Administrator of EPA must have fully approved the SIP requirements for the area under Section 110(k) of the Clean Air Act. This section contains a brief history of EPA approved carbon monoxide Air Quality Improvements Plans for Ada County.

A. History of Carbon Monoxide Nonattainment Designation & State Implementation Plans in Ada County

The northern portion of Ada County was designated Nonattainment for carbon monoxide on March 3, 1978. The current attainment date is December 31, 1995, as established by the Clean Air Act Amendments of 1990. It was never classified under Section 186, and, therefore, remains a not-classified carbon monoxide Nonattainment Area.

The initial *Ada County Carbon Monoxide Air Quality Improvement Plan* was submitted to EPA on January 31, 1980 and approved in the Federal Register (45 CFR 70252) on October 23, 1980. This initial submittal described how measures to improve local air quality and attain the federal standards would be developed, analyzed and recommended. It set an attainment date of December 31, 1982, and called for an AQIP submittal on this date that would detail the specific control measures to be used.

Due to the severity of the carbon monoxide problem the state requested that the attainment date be extended from the 1982 date to December 31, 1987. The extension was granted in the Federal Register, 40 CFR Part 52, on October 23, 1980. On November 8, 1982, the Idaho Department of Health and Welfare submitted an AQIP revision to EPA modifying the control strategies for carbon monoxide emissions and proposing a vehicle inspection and maintenance program, transit, and rideshare control strategies. A change to the operation of the vehicle inspection and maintenance program made the 1982 AQIP not approvable by EPA.

A revised carbon monoxide AQIP was submitted in 1984 and approved on June 6, 1985. This submittal addressed the decentralization of the inspection and maintenance program within Northern Ada County. It also included seven control measures for which some type of emissions reduction credit was taken. An emissions reduction of 173,343 kg/day was estimated to be necessary to attain the carbon monoxide NAAQS. The emissions reduction credits for the 1984 Plan totaled 183,678 kg/day, six percent greater than that required to meet the NAAQS. The following list contains the control measures and the percentage of the total reduction credit assigned:

- | | |
|---|-------|
| 1. Improved federal emissions standards for new automobiles | 54.3% |
| 2. Improvements to local transportation network | 1.0% |
| 3. Staggering work trips | 0.1% |

4. Improved parking design	0.6%
5. Ridesharing	2.5%
6. Transit	10.9%
7. Vehicle inspection and maintenance program	36.3%
Total	105.96%

Northern Ada County was unable to show attainment of the NAAQS at the December 31, 1987 attainment date. Attainment is based on the maximum and second highest non-overlapping running eight-hour carbon monoxide concentrations for the two-year period prior to the attainment date. In 1986 the two highest measurements were 11.6 ppm and 9.7 ppm, while in 1987 the measurements fell under the standard, at 8.3 ppm and 7.9 ppm.

B. Current Carbon Monoxide Air Quality Improvement Plan

On June 29, 1994 a minor revision to the carbon monoxide AQIP was submitted to EPA. This revision enhanced three of the carbon monoxide control strategies listed in the *1984 Carbon Monoxide AQIP*. A direct final rule was issued in the Federal Register (59 CFR 61546) on December 1, 1994 and became effective January 30, 1995. This revision is the current carbon monoxide AQIP for the Northern Ada County Nonattainment Area.

The purpose of the minor revision was to demonstrate that the cumulative effects of efforts made to reduce carbon monoxide emissions in Ada County exceeded the reductions anticipated in the 1984 AQIP and to replace outdated transportation control measures. Control measures addressed included the transit system, rideshare program, and vehicle inspection and maintenance program, further discussed in Section V.A.

V. Verification of Air Quality Improvements

According to Section 107(d)(3)(e)(iii) of the Clean Air Act, states must provide documentation that improvements to air quality are due to permanent and enforceable reductions in emissions. They must further document that these improvements are not due to exceptionally favorable meteorological conditions. Area and mobile source emissions data must be examined for evidence of an economic downturn that may have contributed to attainment, as specified in 57 Federal Register 13498, 13563 (April 16, 1992).

A. Description of Permanent and Enforceable Emissions Reductions

An area can not be redesignated to attainment unless the improvement in air quality is due to permanent and enforceable reductions in emissions. The reduction in ambient carbon monoxide concentrations achieved in Northern Ada County has resulted from a combination of more stringent federal vehicle exhaust standards, transportation system improvements, a vehicle inspection and maintenance program, and local transit and ridesharing programs.

The State of Idaho has adequate authority to enforce the emissions limitations and control measures listed in this Plan, and certifies that these controls are in compliance with state and federal law. DEQ is required, by the Idaho Environmental Protection and Health Act, to supervise and administer a system to safeguard air quality in the State of Idaho [Idaho Code § 39-105(3)(j)]. Idaho Code § 39-105 and 39-107 authorize the Board of Environmental Quality to promulgate rules governing air pollution (see *Appendix F. Rules Establishing State Authority*).

In addition to authorities specific to control measures, the state has authority ^{vii} to implement controls in response to air pollution forecasts, alerts, warnings, and emergency episodes. In the event of an air pollution emergency episode, the state has the authority ^{viii} to prohibit the use of motor vehicles. Further description of the state's legal authority to implement and enforce measures is included in *Appendix F. Rules Establishing State Authority*.

Because these strategies have been federally approved in previous AQIPs, the resulting carbon monoxide emission reductions are also federally enforceable.

The state assures that all of the programs implemented by the carbon monoxide SIP will be continued in future years in order to maintain the NAAQS. The emission impacts of the controls listed below have been accounted for in completing the carbon monoxide emissions inventories for this Maintenance Plan.

The following list contains description and information about transportation control measures listed in the previous AQIP, as well as other specific actions or strategies that result in reductions in emissions.

1. Federal Motor Vehicle Emissions Control Program

A significant reduction in carbon monoxide emissions can be attributed to the federal motor vehicle emissions control program. Emissions standards for motor vehicles are established under Title II of the Clean Air Act. The 1990 Amendments to the Clean Air Act introduce further reductions in emissions in 1994 and 2001. As the newer vehicles begin to replace older, more polluting vehicles, these standards will have an increasing impact on grams per mile carbon monoxide emissions. This program is federally enforced.

2. Transportation Control Measures

Guidance related to Maintenance Plans states that all existing control measures must remain in place. However, the current AQIP, the 1994 Minor Revision, includes several transit and rideshare measures that are essentially unobtainable, impractical, or unenforceable. On the recommendation of EPA Region 10 technical staff, DEQ proposes to eliminate the inappropriate measures as specified below and make up the difference in emissions reductions through improvements to other control measures.

Credits taken in the 1994 Minor Revision for transit and rideshare measures combined equal 5,977 kg/day. Improvements (not required by the AQIP) were made to the vehicle inspection and maintenance program that will result in an additional 19,073 kg/day reduction in emissions. The overall impact to expected emissions of eliminating transit and rideshare measures and improving the vehicle inspection and maintenance program would be an additional 13,096 kg/day reduction. The changes to the program are detailed in Section V.A.2.c on the Ada County Vehicle Inspection and Maintenance Program. The calculations of emissions reductions are contained in *Appendix A. Carbon Monoxide Emissions Inventories*.

(a) Transit

The current AQIP, the 1994 Minor Revision, mandates four improvements to transit services. It lists an anticipated carbon monoxide reduction of 2,978 kg/day for transit measures.

Although there are major efforts being undertaken in the Treasure Valley area to increase transit use, we believe that several of the strategies are inappropriate for use as control measures, as defined in the AQIP. Instead, improvements to the vehicle inspection and maintenance (see *Appendix A-4 Calculation of Emissions Changes Due to Eliminating Transit and Improving I/M Program*) will offset any

credit claimed for these measures. Therefore, authority to enforce the following measures is not required.

- *Boise Urban Stages (BUS) will purchase 32 compressed natural gas buses by 1997 to replace its entire fleet.*

In 1998, the transit system operated 37 buses, 30 of which ran on compressed natural gas. It also operated 9 vans. It remains Boise City policy to replace all diesel buses with compressed natural gas buses, although this is a voluntary action, and implies no commitment.

- *BUS will continue marketing efforts to promote transit.*

BUS continues with marketing efforts to promote transit use.

- *BUS established the goal to increase ridership to 1,124,800 riders by 1997 and to increase ridership by 4% per year.*

BUS had a 1995 ridership of 1.3 million. The level dropped off to just over 1.1 million riders by 1998, where it remained in 2000.

- *The City of Boise will develop a three-phase long-range transit plan for fiscal years 1995 through 2006. The first phase to address the transit system within Boise, the second phase to address transit service in Ada County, and the third phase to address a multi-county service.*

A transit plan for the City of Boise was drafted in 1995. The measures in the transit plan were found to be cost prohibitive, and the plan was never adopted. However, transit within the City of Boise is provided for in subsequent plans described below.

The second phase, to address Ada County transit, was first included in Destination 2015, the long-range transportation plan completed in 1996. Subsequent long-range transportation plans also contain transit plans. Chapter 11 of Destination 2015, containing the Transit Plan, is included in *Appendix G. References*.

In 1999, voters authorized the establishment of a Treasure Valley Regional Public Transportation Authority, originally administered by COMPASS. In 2000, it became independent of COMPASS, and was renamed Valley Inter-Area Transit (VIATrans). VIATrans has scheduled to complete a Treasure Valley Transit Development Plan in 2002. The Goals, Objectives and Policies adopted by the Treasure Valley Regional Public Transportation Authority are included in *Appendix G. References*.

(b) Rideshare

The current AQIP, the 1994 Minor Revision, mandates four improvements to the rideshare program, CommuteRide, which is operated by Ada County Highway District (ACHD). It lists an anticipated carbon monoxide reduction of 2,999 kg/day for rideshare measures. Although there are major efforts being undertaken in the Treasure Valley area to increase rideshare, we believe that several of the strategies are inappropriate for use as control measures, as defined in the AQIP. Instead, improvements to the vehicle inspection and maintenance program (see *Appendix A-4 Calculation of Emissions Changes Due to Eliminating Transit and Improving I/M Program*) will offset any credit claimed for these measures. Therefore, authority to enforce the following measures is not required.

- *Increase rideshare levels to 16% of all commuter trips by 1995 and 17.5% by 1997.*

An April 1997 study determined that ridesharing or carpooling accounts for 13.5% of all commuter trips.

- *Increase the vanpool fleet to 19 vans by 1995 and 23 vans by 1997.*

ACHD's CommuteRide program currently operates 35 vanpool vehicles.

- *Increase the number of Park and Ride lots to 19 by 1994 and 25 by 1997.*

ACHD established the 25th Park and Ride lot in the Treasure Valley in October 2000.

- *Increase Park and Ride usage by 10% per year.*

ACHD does not currently measure Park and Ride usage.

Although some of the specified goals were not met, the CommuteRide program has expanded its focus and become more effective over the years. Although operated by an Ada County agency, the CommuteRide program has grown to include all of the Treasure Valley. Some aspects have expanded to reach other areas of Southwest Idaho. The agency uses extensive marketing to encourage participation in its various programs, and maintains a website that offers information about a wide range of transportation alternatives from both the public and private sector. In addition to vanpool routes across the region, the program operates a carpool matching service and is involved in extensive employer outreach efforts to encourage employers to offer benefits and programs to reduce employee vehicle use and travel during peak hours.

(c) Ada County Vehicle Inspection and Maintenance Program

For 1995, a reduction of 32,889 kg per day of carbon monoxide can be attributed to the Ada County vehicle inspection and maintenance program. This equates to 16.2% of total daily carbon monoxide emissions. This estimate was determined based on a comparison of emissions estimates generated using MOBILE5b, EPA's emissions model. The model was run for on-road mobile sources both with and without the control program in effect.

The vehicle inspection and maintenance program, operated by the Ada County Air Quality Board (AQB), was instituted in 1984. Vehicles registered in Ada County are required to pass the emissions test or face revocation of registration. Subsequent to the implementation of the vehicle inspection and maintenance program, exceedances of the eight-hour carbon monoxide NAAQS dropped steadily, from 15 in 1983, to zero only four years later.

Local ordinances, adopted in Ada County, the City of Boise, the City of Meridian, Garden City, and the City of Eagle, make the emissions testing program mandatory. Although the City of Kuna has not adopted the emissions control ordinance, the AQB routinely sends notices of emissions test requirements to all Ada County residents. It is believed that many Kuna residents comply with the test, even in the absence of an enforceable ordinance. Records show that approximately 10% of Ada County vehicle miles traveled are by out-of-county vehicles. These vehicles aren't subject to test, and, therefore, may have higher carbon monoxide emissions. Higher emissions from out-of-county vehicles are accounted for in the emissions inventory.

The current AQIP, the 1994 Minor Revision, mandated some changes to the vehicle emissions testing program to make it more stringent. These changes were implemented and have been maintained.

The program, as it existed in 1995, applied to all gasoline vehicles model year 1965 or newer. The test consisted of an annual computerized evaluation of carbon monoxide in vehicle exhaust at idle. For 1984 and newer model years the inspection also includes a visual check of emissions control equipment. Waivers were issued for a period of one year based on a request by the owner. A second waiver would be issued if the vehicle continued to fail the test and the owner could show that a minimum amount of money had been spent on repairs (\$175 for 1981 and newer vehicles, and \$75 for 1980 and older vehicles).

Additional modifications made between July 2000 and January 2001 have made the program even more effective. Changes include:

- Lowering the carbon monoxide cutpoint, or allowable percentage.
- Adding a standard for hydrocarbon emissions.
- Modifying the waiver policy so initial waivers can be issued only after at least \$150 in repair work has been done on the vehicle.
- Adding diesel vehicles to the list of vehicles required to pass an emissions test.
- Expanding the test from idle only to a two-speed test conducted at both idle and at 2,500 revolutions per minute.
- Eliminating the test and repair option for test stations and their owners. Stations are no longer permitted to offer repair services to correct emissions.

These improvements, not required by the AQIP, will result in an additional 19,073 kg/day reduction in emissions over the previous program. A complete description of the program, and the proposed modifications is located in *Appendix B-1 Description of Ada County Vehicle Inspection and Maintenance Program*.

Although the program is currently operated via local ordinance, under the Idaho State Constitution, the legislature has the authority to impose rules relating to motor vehicles.

3. Controls on Stationary Sources

Section 172(c)(5) requires that the state assure provisions for New Source Review. DEQ has a fully implemented New Source Review and permit program. In 1986, the PSD program was delegated to the state. Once the carbon monoxide Nonattainment Area has been redesignated, major sources that are new or are undergoing major modifications will be required to undergo Prevention of Significant Deterioration Review, which includes requirements for Best Available Control Technology. New minor sources or sources undergoing minor modifications must obtain a Permit to Construct, which includes provisions to ensure protection of the NAAQS ^{ix}.

“The requirements of the Part D new source review program will be replaced by the prevention of significant deterioration (PSD) program once the area has been redesignated. However, in order to ensure that the PSD program will become fully effective immediately upon redesignation, either the State must be delegated the Federal PSD program, or the State must make any needed modifications to its rules to have the approved PSD program apply to the affected area upon redesignation.”

(Memorandum from EPA, John Calcagni, Director of Air Quality Management Division, September 4, 1992. See *Appendix G. References*).

4. Summary of Emissions Control Strategies

The control strategies applicable under this Limited Maintenance Plan are:

- Federal motor vehicle emissions control program
- Ada County vehicle inspection and maintenance program
- Controls on stationary sources.

B. Voluntary Measures

The following measures are entirely voluntary in Ada County, and are described in this document for informational purposes only. Inclusion of this information does not imply commitment to continue. No demonstration of state authority to enforce is required, as these are voluntary measures.

1. Transit

BUS will continue efforts to promote transit use, improve service, and increase ridership.

VIATrans will complete the Treasure Valley Transit Development Plan in 2002 and pursue its stated Goals, Objectives and Policies (see *Appendix G. References*).

2. Rideshare

Ada County Highway District's CommuteRide program will continue efforts to increase use of rideshare and Park and Ride.

3. Oxygenated Fuels

Through state legislation, the State of Idaho provides a 2.5% tax incentive for the use of oxygenated fuel.

4. CNG Buses

BUS currently operates compressed natural gas buses, using diesel buses as backup in case of breakdowns. The City of Boise policy is to replace all diesel buses with compressed natural gas buses.

5. Transportation System Improvements

Transportation system improvements include enhancement to signalization, expansion of the arterial and collector system, improvements to intersections, and provision of alternative routes. These improvements are ongoing, and have resulted in reduced idle time, a better distribution of traffic and improved traffic flow.

An example of a transportation system improvement is the Broadway-Chinden connector, completed in 1992. Prior to completion, a significant amount of traffic attempting to go east and west had to travel through the central business district, which is also a major

employment center and trip destination. This district is characterized by high, narrow corridors, heavy signalization and average speeds less than 25 mph. The connector is characterized by wide corridors, synchronized traffic signalization and average speeds more than 25 mph. While the connector is only about a quarter mile south of the older east to west route, it provides a quicker, more efficient, and more direct route for east/west traffic, resulting in reduced carbon monoxide emissions.

As a voluntary measure, the 1994 Minor Revision includes the plan to improve traffic operation by installing a cable signal interconnect to optimize and synchronize traffic lights for West Bench, Meridian, and State Street. ACHD now operates a central transportation management center that coordinates signal timing across a wide area, including these listed projects.

6. *Improved Parking Design*

As listed in the 1994 Minor Revision, it is the stated policy of transportation agencies in Ada County to reduce the number of parking spaces and increase parking fees to discourage the use of free commuter parking spaces. If parking shortages make driving less convenient, commuters will be more inclined to use alternative modes.

7. *Staggered Working Hours*

CommuteRide, operated by Ada County Highway District (ACHD), does extensive outreach with local employers. As a result, several major employers in Ada County offer flex time and staggered hours to their employees.

ACHD has several programs aimed at employers, including a “Transicheck” program that allows employers to purchase tickets towards the cost of vanpool, bus or other alternative modes. They also operate a guaranteed ride home program, in which people who have bicycled or walked to work can arrange for a free taxi ride home in the event of an emergency or other situation which causes them to be unable to get home. The program also encourages employers to offer flex time or staggered work hours to employees, organize carpools, or offer parking or transportation benefits that encourage alternative mode travel. Over 70 local employers participate in this program to varying degrees.

8. *Wood Burning and Outdoor Burning Bans*

Ordinances prohibiting residential wood burning during inversion conditions were adopted locally in 1988. Currently Ada County and the Cities of Boise, Eagle, Garden City, and Meridian have this ordinance on the books. If conditions warrant, DEQ issues a ban prohibiting all open outdoor burning and residential wood burning (except in EPA certified stoves). Although these measures were designed to address particulate matter issues, they also have an impact on carbon monoxide emissions. The *1990 Carbon Monoxide Emissions Inventory* estimated that over 25% of winter daily carbon monoxide emissions in this area were due to residential wood burning. The *1995 Carbon Monoxide*

Emissions Inventory showed a reduction in the relative impact of residential wood burning, with wood burning contributing only 6% of winter carbon monoxide emissions.

C. Meteorology and Ambient Carbon Monoxide Concentration

For redesignation of the Nonattainment Area to attainment it is necessary to show that reduction in the ambient carbon monoxide concentrations are the result of permanently enforceable emissions reductions, and not the result of yearly variations in meteorological conditions.

In general, comparing seasonal or annual weather trends and levels of carbon monoxide is not a productive exercise. There is a very low correlation between long term weather trends and carbon monoxide levels. Shorter term, daily variations in weather do play a role in the accumulation of carbon monoxide on specific days.

A review of historical data shows that all carbon monoxide exceedances and most elevated ambient carbon monoxide concentrations have occurred during afternoon rush hours. While concentrations peak at lower levels now than in the past, the temporal pattern of the peaks has remained consistent since the mid-1970's. In the Ada County area, there are generally two daily peaks in carbon monoxide concentrations; one in early morning and one in late afternoon, corresponding to rush hour traffic patterns. The highest peaks occur in the late afternoon hours. The probability of a high carbon monoxide concentration is greatest on Friday and lowest on Sunday, corresponding closely with levels of driving activity throughout the week. This evidence indicates that the dominating factor in high carbon monoxide concentrations is the mobile source emission level.

Based on the average of the historical values, 1993 was a colder than normal winter, with the number of heating-degree-days in the winter months higher than normal. 1994 would be considered to have a normal number of heating-degree-days. 1995 and 1996 were warmer than normal, with fewer heating-degree-days than normal. There is no corresponding fluctuation in the number of days with higher carbon monoxide concentrations for these years. While most elevated carbon monoxide concentrations (greater than 8 ppm) occurred on specific days that were colder than normal, there does not appear to be any relationship to the overall trend of seasonal temperature.

The Deep Stable Layer (DSL) weather patterns associated with high particulate matter concentrations in Ada County appear to have low correlation with carbon monoxide accumulations. DEQ has identified a mild stagnant condition termed a Lower Stable Layer (LSL) that may be related to elevated carbon monoxide concentrations. In LSL conditions, 10% or more of the lower 500 meters of the atmosphere consists of strong inversion layers. From 1993 through 1996, the number of days with LSL conditions was within the historical average.

LSL conditions were the only meteorological conditions found to affect carbon monoxide levels. Because the number of LSL days were within the average for the years 1993 to 1995, these years

are considered to have representative meteorology for carbon monoxide. Therefore, the state asserts that favorable meteorological conditions could not be responsible for the reduction in the ambient carbon monoxide concentrations. A complete analysis of meteorological conditions is located in *Appendix D Treasure Valley Meteorology and Impact on Carbon Monoxide*.

D. Economic Conditions and Ambient Carbon Monoxide Concentration

Between 1990 and 1996, Ada County was one of the fastest growing counties in the United States. Population increased over 25 % from 205,775 to more than 260,000 in that time period. Growth has slowed since that time, but is expected to continue at a moderate rate into the future (1997 Demographic Report, APA, see *Appendix G. References*). Reductions in ambient carbon monoxide concentrations cannot, therefore, be attributed to economic conditions.

VI. Air Quality Maintenance Plan

Section 107(d)(3)(E) of the Clean Air Act specifies that for an area to be redesignated as attainment, the EPA must approve a Maintenance Plan that meets the requirements of Section 175A. The purpose of the Maintenance Plan is to provide for the maintenance of the Carbon Monoxide NAAQS for at least ten years after the redesignation. Clean Air Act Section 107(d)(3)(D) allows the EPA Administrator up to 18 months after submittal to process a redesignation request. To accommodate the EPA's review time and to be consistent with other planning timelines, this Maintenance Plan will cover the period from 2001 to 2012.

A. Attainment Year Emission Inventory

This section summarizes the findings of the *Northern Ada County 1995 Carbon Monoxide Base and Future Year Emissions Inventory*. The complete document is located in *Appendix A. Carbon Monoxide Emissions Inventories*.

This emissions inventory was developed consistent with EPA guidance and covers the period of data that was used to demonstrate attainment of the NAAQS. The emissions inventory was based on winter emissions, the typical carbon monoxide season. All public involvement processes were conducted (see *Appendix H. Public Comment, Public Hearing, and Response*).

Although emissions projections were developed with the emissions inventory, they are intended for planning use only. A budget for future transportation or general conformity determinations will not be established.

“There is no requirement to project emissions over the maintenance period.”

(EPA memorandum dated October 6, 1995 from Joseph W. Paisie, Group Leader Integrated Policy and Strategies Group. See *Appendix G. References*).

This emissions inventory addresses the emissions contribution of sources within Ada County, as well as out-of-county sources, including vehicles that are not subject to the Ada County emissions testing program and industrial facilities.

DEQ technical staff chose to establish the emissions inventory for the year 1995 for several reasons. Primarily, DEQ wanted to ensure that years with higher monitored ambient concentrations of carbon monoxide were analyzed. Carbon monoxide monitoring data from 1993, 1994, and 1995 shows higher ambient concentrations than in more recent years. Also, 1995 was the peak year for socio-economic growth. Since 1995, there have been no major increases in point, area, off-road mobile, or on-road mobile emissions sources in the area. In addition, good quality emissions inventory data were available due to the fact that 1995 was also chosen as the most recent PM₁₀ emissions inventory base year.

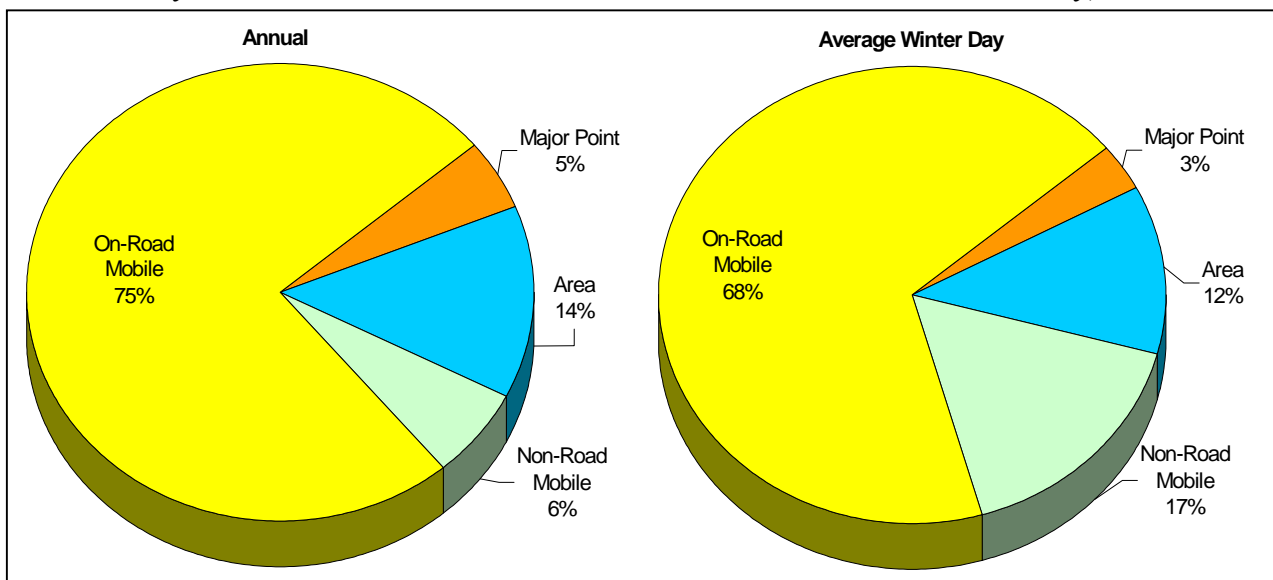
Although not required for a Limited Maintenance Plan, DEQ developed future year emissions estimates for planning purposes. Future year emissions projections will aid in the analysis of the proposed emissions increases from major carbon monoxide sources in the area, and of the future effectiveness of existing and proposed Ada County carbon monoxide control measures. Based on these considerations, emissions projections were developed for 2000 and 2010.

On-road mobile sources accounted for 75% of average winter day carbon monoxide emissions. Table II and Figure V show the relative 1995 contributions of sources in table form and as pie charts.

Table II. 1995 Ada County Carbon Monoxide Emissions - Annual and Average Winter Day Emissions (Source: Northern Ada County 1995 Carbon Monoxide Base and Future Year Emissions Inventory)

Source	1995 Annual Emissions			1995 Average Winter Day Emissions		
	Tons/Year	Metric Tonnes/Year	Percent Total	Pounds/Day	Kilograms/Day	Percent Total
Major Point	2,877	2,610	3%	22,320	10,124	5%
Area	10,743	9,746	12%	60,429	27,410	14%
Non-Road Mobile	14,792	13,419	17%	28,918	13,118	6%
On-Road Mobile	61,180	55,492	68%	335,235	152,035	75%
Total	89,593	81,268		446,902	202,687	

Figure V. Pie Charts: 1995 Ada County Carbon Monoxide Emissions (Source: Northern Ada County 1995 Carbon Monoxide Base and Future Year Emissions Inventory)



1. On-Road Mobile Sources

Motor vehicles remain the largest carbon monoxide source in the Nonattainment Area. Vehicle Miles Traveled (VMT) were estimated by COMPASS for each roadway type using TP+, a widely used travel demand forecasting model. TP+ generates VMT based on weekday traffic demands. Emissions were estimated by multiplying VMT for each roadway type by an emissions factor specific to a given roadway type and average speed. Emissions factors were generated using MOBILE5b, the most recent version of EPA's emissions model.

Emissions factors generated by MOBILE5b vary depending on many parameters, including vehicle speed, ambient temperature, and vehicle fleet mix. Two separate types of emissions factors were developed. One set of factors was generated for Ada County vehicles, which are subject to an emissions testing program. Another set of factors were generated for the vehicles not registered in the emissions testing area, which represent 10.1% of total VMT in Ada County.

2. Nonroad Mobile Sources

Nonroad mobile sources include vehicles and machinery that do not operate on roadways, such as locomotives, aircraft, and agricultural equipment. Emissions for nonroad mobile sources were estimated by combining an emissions factor with a measure of activity. In the absence of specific local activity data, NEVES data developed for Provo-Orem, Utah, adjusted for population differences, were used. Provo-Orem was chosen because it is similar to Ada County in terms of population, elevation, climate, and economic activity. Emissions from military aircraft and its supporting equipment were obtained directly from the Idaho Air National Guard.

3. Major Point Sources

Major point sources that must be included in the Emissions Inventory are stationary sources that emit at least 100 tons per year of carbon monoxide and are located within a 25-mile radius of the Nonattainment Area. A survey of industrial sources conducted for the 1995 PM₁₀ emissions inventory found that there are no point sources that meet this criteria currently within the Northern Ada County Nonattainment Area, although there is one located within the 25-mile radius in Canyon County. Activity data from this survey and from direct communication with the largest facilities were used with AP-42 emissions factors to estimate carbon monoxide emissions.

Smaller stationary sources were included in the area source portion of the emissions inventory.

4. Area Sources

Area sources represent a collection of many small points of emissions within the Nonattainment Area, including smaller industrial facilities, lawn and garden equipment, wood or open burning, and fuel combustion. Emissions from area sources were estimated by multiplying an emissions factor by activity data. For a number of area source categories, activity data were based on extensive data collection conducted for the 1995 PM₁₀ emissions inventory. Activity data for area sources not included in the PM₁₀ emissions inventory were gathered specifically for this inventory.

B. Maintenance Demonstration

Under the Limited Maintenance Plan option, the maintenance demonstration requirement is considered to be satisfied:

“The maintenance demonstration requirement is considered to be satisfied for nonclassifiable areas if the monitoring data show that the area is meeting the air quality criteria for limited maintenance areas (7.65 ppm or 85% of the CO NAAQS) The EPA believes if the area begins the maintenance period at or below 85 percent of exceedance levels, the air quality along with the continued applicability of PSD requirements, any control measures already in the SIP, and Federal measures, should provide adequate assurance of maintenance over the initial 10-year maintenance period.

When EPA approves a limited maintenance plan, EPA is concluding that an emissions budget may be treated as essentially not constraining for the length of the maintenance period because it is unreasonable to expect that such an area will experience so much growth in that period that a violation of the CO NAAQS would result.”

(Memorandum from EPA, Joseph W. Paisie Group Leader Integrated Policy and Strategies Group, October 6, 1995. See Appendix G. References).

C. Monitoring Network Commitment

In accordance with 40 CFR 58, DEQ will continue to operate a carbon monoxide monitoring network in accordance with applicable EPA guidance in order to verify the attainment status of the area over the maintenance period.

D. Verification of Continued Attainment

Section 172(c)(3), Section 187(a)(1) and Section 187(a)(5) of the Clean Air Act require that the Maintenance Plan indicate how the progress of the Maintenance Plan will be tracked. A comprehensive review of the assumptions, demographic data, and estimated vehicle miles traveled used to develop the emissions inventory will be conducted no later than 2005 to determine whether the assumptions are still reasonable and descriptive of conditions in Northern

Ada County. If actual growth of carbon monoxide emissions exceeds projected growth by 20% or more, or if relative contributions from source categories, in comparison with other source categories, change by 10% or more, an update to the emissions inventory will be prepared. Based on this data, DEQ will work with EPA Region 10 to determine if a revision of the Maintenance Plan is necessary.

E. Contingency Plan

Section 175A of the Clean Air Act requires that the Maintenance Plan include contingency provisions that would be implemented in order to promptly correct any violation of the Carbon Monoxide NAAQS that occurs after redesignation to attainment. This section also requires documentation of the authority to implement and enforce the measures. However, these measures do not have to be fully implemented in order for the Maintenance Plan to be approved:

“These contingency measures are distinguished from those generally required for Nonattainment Areas under section 172 (c)(9) and those specifically required for O3 and CO Nonattainment Areas under sections 182(c)(9) and 187 (a)(3), respectively. For the purposes of section 175A, a State is not required to have fully adopted contingency measures that will take effect without further action by the State in order for the maintenance plan to be approved.”

(Memorandum from EPA, John Calcagni, Director of Air Quality Management Division, September 4, 1992. see *Appendix G. References*).

1. Contingency Measure Triggering Protocol

Implementation of the carbon monoxide contingency measures will be triggered under two circumstances. Contingency measures will be triggered immediately upon any exceedance of the Carbon Monoxide NAAQS, based on quality assured data, recorded at any site within the Nonattainment Area. Contingency measures will also be triggered if quality assured monitoring data shows non-overlapping eight-hour average carbon monoxide concentrations of 8.0 ppm on 4 or more days within a single winter season (November through March) within the Nonattainment Area.

2. Contingency Measures

In the event that either of the two triggers is activated, DEQ shall initiate one of the following contingency measures through promulgation of a rule by the Board of Environmental Quality ^x.

(a) Oxygenated Fuels Program

DEQ will promulgate a rule requiring all gasoline fuels dispensed in the Nonattainment Area to contain ethanol at a minimum of ten percent (10%) by volume.

(b) Alternative EPA-Approved Contingency Measure

DEQ understands EPA is reviewing the effectiveness of oxygenated fuels as a carbon monoxide reduction measure, and may provide guidance regarding more effective alternative contingency measures for carbon monoxide reduction. Should DEQ determine a more effective contingency measure is available, DEQ shall negotiate and implement an alternative EPA-approved contingency measure.

3. Schedule and Procedure for Adoption and Implementation

DEQ shall adopt the chosen contingency measure through a rule-making pursuant to the schedule and procedures enumerated in the Idaho Administrative Procedures Act and the Rules of Administrative Procedure of the Attorney General ^{xi}. (see *Appendix F. Rules Establishing State Authority*)

Implementation of the chosen measure will occur no later than the first day of October following activation of a trigger. Implementation of measures will continue until the end of the maintenance period or until such time that 2 years of quality assured monitoring data show no carbon monoxide levels over 7.65 ppm (85% of the standard).

F. Conformity

Section 176(c) of the Clean Air Act establishes the conformity requirement for federally funded activities. Conformity requirements are designed to ensure that these activities do not further degrade air quality, contribute to air quality violations, or delay attainment of the NAAQS. In essence, federally funded activities that are not in accordance with the goals of air quality plans will not be allowed to proceed.

The specific procedures to determine conformity of transportation plans, programs, and projects are described in 40 CFR 93, Subpart A, revised as of August, 1997. The Idaho Transportation Conformity Rule, finalized on April 12, 2001, adopts by reference portions of 40 CFR Part 93, Subpart A Section 100-129, with the exception of certain portions ^{xii}.

The specific procedures to determine conformity of other, general federal actions is outlined in 40 CFR 51, Subpart W, Revised as of July, 1998 and 40 CFR 93, Subpart B.

Although federal activities are required to conform to all applicable air quality plans, the conformity requirements for a Limited Maintenance Plan are less stringent.

“The transportation conformity rule (58 FR 62188, November 24, 1993) and the general conformity rule (58 FR 63214, November 30, 1993) apply to Nonattainment Areas and maintenance areas operating under maintenance plans. Under either rule, one means of demonstrating conformity of Federal actions is to indicate that expected emissions from

planned actions are consistent with the emissions budget for the area. Emissions budgets in limited maintenance plan areas may be treated as essentially not constraining for the length of the initial maintenance period because it is unreasonable to expect that such an area will experience so much growth in that period that a violation of the CO NAAQS would result. In other words, EPA would be concluding that emissions need not be capped for the maintenance period. Therefore, in areas with approved limited maintenance plans, Federal actions requiring conformity determinations under the transportation conformity rule could be considered to satisfy the “budget test” required in sections 93.118, 93.119, and 93.120 of the rule. Similarly, in these areas, Federal actions subject to the general conformity rule could be considered to satisfy the “budget test” specified in section 93.158(a)(5)(I)(A) of the rule.”

(Memorandum from EPA, Joseph W. Paisie, Group Leader Integrated Policy and Strategies Group, October 6, 1995. See *Appendix G. References*).

The guidance states that there is no need for a constraining emissions budget under the Limited Maintenance Plan option, because the emissions budget is considered to be unconstrained for the length of the maintenance period.

Although emissions projections were developed with the carbon monoxide emissions inventory, they are intended for planning use only. A budget for future transportation or general conformity determinations is not being established for Northern Ada County.

1. Transportation Conformity

While there is no requirement for a budget test, the EPA has not precluded states and local agencies from satisfying other requirements of the conformity process. For transportation conformity, components of the conformity process include analysis of hot-spots, consultation on applicable actions, and implementation of any Transportation Control Measures specified in state and federal transportation conformity rules.

As identified in 40 CFR 93.105, the lead transportation planning agency is responsible for demonstrating compliance with transportation conformity requirements. The lead transportation agency in Ada County is the Community Planning Association (COMPASS), an MPO which has been recently expanded to include both Ada and Canyon Counties. COMPASS will oversee any transportation conformity determinations of the Interagency Consultation Committee. The Interagency Consultation Committee is a group of representatives of state and local transportation agencies, the state air quality agency, Department of Transportation (DOT) and EPA, as specified in 40 CFR 93.105 (51.402) and the Idaho Transportation Conformity Rule^{xiii}. The Interagency Consultation Committee is responsible for overseeing the development of conformity analyses.

The Idaho Transportation Conformity Rule was finalized on April 12, 2001. This rule adopts by reference portions of 40 CFR Part 93, Subpart A Section 100-129 (see *Appendix F. Rules Establishing State Authority*).

(a) Hot Spot Analysis

Hot spots include any area with the potential for carbon monoxide concentrations to build up, including intersections that could result in congestion, or other areas where physical features such as high-rise buildings or canyon walls could result in restricted air flow in the area. The purpose of hot-spot analyses is to ensure that specific transportation projects do not cause a localized exceedance of the Carbon Monoxide NAAQS.

State rules provide that the Interagency Consultation Committee^{xiv} determines the methods and assumptions to be used in identifying potential carbon monoxide hot spots. Project sponsors will be responsible for performing technical conformity analysis and offsetting the impacts of projects at identified hot spots. Analysis shall be conducted according to procedures specified in 40 CFR 93.116, 40 CFR 93.13, and the Idaho Transportation Conformity Rule^{xv}. For any hotspots that show potential carbon monoxide concentrations exceeding the standards, mitigation measures are required.

(b) Continuation of Build/No-Build Analysis

Federal register 40 CFR 93.109(d) requires that carbon monoxide Nonattainment and Maintenance Areas satisfy either an emissions budget test or a build/no-build conformity analysis. However, EPA guidance related to Limited Maintenance Plans eliminates this requirement.

“...in areas with approved limited maintenance plans, Federal actions requiring conformity determinations under the transportation conformity rule could be considered to satisfy the “budget test” required in sections 93.118, 93.119, and 93.120 of the rule.”

(Memorandum from EPA, Joseph W. Paisie, Group Leader Integrated Policy and Strategies Group, October 6, 1995. See *Appendix G. References*).

Nevertheless, COMPASS has agreed to continue the use of build/no-build analysis, the current method used for conformity analysis. This analysis will be used for planning purposes, to aid in future emission analyses, and to ensure that transportation activities will not lead to carbon monoxide emissions that could contribute to an exceedance of the NAAQS. For any build-out scenarios that could result in an increase in carbon monoxide emissions, mitigation measures will be required.

(c) Analysis of Regionally Significant Projects

Regionally significant projects are also subject to conformity analysis. On October 16, 2001 the Interagency Consultation Committee agreed upon the following definition of regional significance for Ada County.

“Roadway improvement projects in Ada and Canyon Counties, Idaho, will be designated "Regionally Significant" when they add continuous through-lane capacity. Continuous through-lane capacity is defined as the addition of a through lane to a roadway that extends from one cross street arterial to another cross street arterial, or, in the case of a freeway, the addition of a through lane to the freeway that extends from the on ramp(s) of one interchange to a point beyond the off-ramp(s) of the adjacent interchange. This definition would also include one or more of the following characteristics;

- 1. Project is on a roadway with a principal arterial or higher functional classification;***
- 2. Project is on a roadway with a minor arterial or higher functional classification and has a twenty (20) year projected traffic volume of 45,000 or higher vehicles per day after construction.”***

This definition is based on the federal definition of regional significance, as specified in 40 CFR 93 Vol. 62, Number 158, 43803, and takes into account local features. This definition is a dynamic process that may change as conditions change. COMPASS should be contacted for the most current definition.

For any transportation plans, programs, or projects that meet these criteria, the Interagency Consultation Committee will conduct an analysis to determine if the action could cause or contribute to an exceedance of the Carbon Monoxide NAAQS. Analysis shall be conducted according to procedures specified in 40 CFR 93.100-182. For any regionally significant plans, programs, or projects that show potential carbon monoxide concentrations exceeding the standards, mitigation measures are required.

(d) Implementation of Transportation Control Measures

No new control measures have been proposed for this Maintenance Plan. The current AQIP, the 1994 Minor Revision, identified three local Transportation Control Measures:

- Rideshare
- Transit
- Vehicle inspection and maintenance program

As discussed in Section V, DEQ intends to eliminate the transit and rideshare measures as inappropriate, and make up the difference in emissions reductions through improvements to the vehicle inspection and maintenance program. The vehicle inspection and maintenance program, the only remaining transportation control measure, will continue to be operated throughout the life of this Limited Maintenance Plan.

(e) Public Consultation Procedure

The public and interested parties will be given early and reasonable opportunity to comment on any carbon monoxide conformity analyses, including analyses of hot spots, regionally significant projects, or build/no-build analysis. COMPASS and the Interagency Consultation Committee will conduct public consultation procedures as outlined by Idaho State Rules ^{xvi} and 40 CFR 93.105 or 23 CFR 450.

2. General Conformity

While there is no requirement for a budget test, the EPA has not precluded states and local agencies from satisfying other requirements of the general conformity process.

For any new projects or actions identified in 40 CFR 93.150, the federal agency overseeing the project is responsible for conducting a conformity analysis. DEQ will provide guidance to federal agencies to ensure compliance is achieved. State rules for the control of air pollution ^{xvii} establish DEQ's authority to require responsible agencies to provide DEQ with certified information about the project. Agencies should begin to work with DEQ during early stages of planning to determine the expected quantity of carbon monoxide emissions. If expected carbon monoxide emissions are greater than or equal to 100 tons per year, the de minimus threshold specified in 40 CFR 51.853, analysis shall be conducted to determine the magnitude of emissions and impact on carbon monoxide concentrations. This analysis shall be conducted according to procedures specified in 40 CFR 93.158. If necessary, mitigation measures must be applied as specified in 40 CFR 93.160. DEQ will review and comment on conformity determinations, including technical analyses, alternatives, and proposed mitigation.

ⁱ The Rules for the Control of Air Pollution in Idaho, IDAPA 58.01.01, Section 203 - Permit Requirements for New and Modified Stationary Sources, Section 403 - Permit Requirements for Tier II Sources, and Section 205 - Permit Requirements for New Major Facilities or Major Modifications In Attainment or Unclassifiable Areas

ⁱⁱ The Rules for the Control of Air Pollution in Idaho, IDAPA 58.01.01, Section 550 - Air Pollution Emergency Rule

ⁱⁱⁱ The Rules for the Control of Air Pollution in Idaho, IDAPA 58.01.01, Sections 557 to 560 on Public Notification

^{iv} The Rules for the Control of Air Pollution in Idaho, IDAPA 58.01.01, Section 209 - Procedures for Issuing Permits (Permits to Construct) and Section 404 - Procedures for Issuing Permits (Tier II)

^v The Rules for the Control of Air Pollution in Idaho, IDAPA 58.01.01, Section 470 - Permit Application Fees For Tier II Permits and Section 526 – 538 - Registration and Registration Fees (for Tier I Permits)

^{vi} The Rules for the Control of Air Pollution in Idaho, IDAPA 58.01.01, Sections 563-574 - Transportation Conformity Rule

^{vii} The Rules for the Control of Air Pollution in Idaho, IDAPA 58.01.01, Section 550 - Air Pollution Emergency Rule

^{viii} The Rules for the Control of Air Pollution in Idaho, IDAPA 58.01.01, Section 561 - Air Pollution Emergency (General Rules)

^{ix} The Rules for the Control of Air Pollution in Idaho, IDAPA 58.01.01, Section 200-223 - Procedure and Requirements for Permits to Construct

^x Idaho Code 39-105 and 39-107 authorize the Board of Environmental Quality to promulgate rules governing air pollution for the Department of Environmental Quality

^{xi} Idaho Administrative Procedures Act, Idaho Code 67-5201, et. seq. , Rules of Administrative Procedure of the Attorney General, IDAPA 04.11.01

^{xii} 40 CFR, Sections 93.102(c), 93.104(d), 93.104(e)(2), 93.105, 93.109(c)-(f), 93.118(e), 93.119(f)(3), 93.120(a)(2), 93.121(a)(1), and 93.124.(b).

^{xiii} The Rules for the Control of Air Pollution in Idaho, IDAPA 58.01.01, Sections 563-574 - Transportation Conformity Rule

^{xiv} The Rules for the Control of Air Pollution in Idaho, IDAPA 58.01.01, Section 571 - Transportation Conformity - Consultation Procedures

^{xv} The Rules for the Control of Air Pollution in Idaho, IDAPA 58.01.01, Sections 563-574 - Transportation Conformity Rule

^{xvi} The Rules for the Control of Air Pollution in Idaho, IDAPA 58.01.01, Section 574 - Transportation Conformity – Public Consultation Procedures

^{xvii} The Rules for the Control of Air Pollution in Idaho, IDAPA 58.01.01, Sections 122 and 123 - Information Orders by the Department and Certification of Documents