
FINAL
AIR QUALITY CONFORMITY ANALYSIS
AND
DETERMINATION

Prepared by:
Butte County Association of Governments
Adopted: December 11, 2008



Butte County Association of Governments
2580 Sierra Sunrise Terrace, Suite 100
Chico, CA 95928
530-879-2468
<http://www.bcag.org>



**BUTTE COUNTY ASSOCIATION OF GOVERNMENTS
RESOLUTION NO 2008/2009-09**



**ADOPTION OF THE 2008 REGIONAL TRANSPORTATION PLAN AND THE AIR
QUALITY CONFORMITY ANALYSIS AND DETERMINATION FOR BUTTE COUNTY**

WHEREAS, the Butte County Association of Governments is the designated Metropolitan Planning Organization for Butte County in accordance with 23 USC 134(b)(6); and Section 450.306 of the Metropolitan and Statewide Planning Rule;

WHEREAS, the Safe Accountable Flexible Efficient Transportation Equity Act a Legacy for Users (SAFETEA-LU) requires the Butte County Association of Governments, as the Metropolitan Planning Organization, to prepare a Transportation Improvement Program in cooperation with the State and transit operators, to include all projects to be funded under Title 23 and the Federal Transit Administration grants; and requires BCAG to prepare a long-range Regional Transportation Plan and short-range Federal Transportation Improvement Program;

WHEREAS, BCAG, through the conduct of a continuing, comprehensive, and coordinated transportation planning process, and in conformance with all applicable federal and state requirements, has prepared the 2008 Regional Transportation Plan and the Air Quality Conformity Analysis and Determination for Butte County;

WHEREAS, the 2008 RTP includes all required components (Policy, Action and Financial) and Air Quality Conformity Analysis and Determination providing documentation that the projects conform to the applicable federal air quality requirements, and an Environmental Impact Report complying with the California Environmental Quality Act requirements;

WHEREAS, the 2008 RTP was developed in accordance with the BCAG Public Participation Plan (PPP) including a public hearing prior to adoption;

WHEREAS, the Butte County Association of Governments has prepared a new Regional Emissions Analysis and Determination for the 2008 Regional Transportation Plan and 2009 Federal Transportation Improvement Program that demonstrate current and future emissions of the ozone precursors ROG and NO_x will be less than the 2002 emissions levels, and current and future carbon monoxide emissions will be below their budget threshold of 80 tons per day;

WHEREAS, the Butte County Association of Governments, in accordance with the Transportation Conformity Rule requirements applicable to Butte County (§51.464 and §51.436 – 51.440), has satisfied the requirements of the “less-than/equal-to 2002” test for federal 8-hour ozone standard, and the “budget test” for carbon monoxide for the 80-tons-per-day budget. Based on this analysis, the 2009 Federal Transportation Improvement Program (FTIP) and 2008 RTP **conforms to the applicable State Implementation Plan (SIP) and all applicable sections of the EPA’s Transportation Conformity Rule;**

NOW THEREFORE BE IT RESOLVED that the Butte County Association of Governments has prepared and adopted the 2008 Regional Transportation Plan and Air Quality Conformity Analysis and Determination in accordance with SAFETEA-LU and the Transportation Conformity Rule requirements applicable to Butte County. Based on this analysis, the Butte County 2008 Regional Transportation Plan and the Butte County 2009 Federal Transportation Improvement Program, through Amendment #1, conforms to the applicable State Implementation Plan (SIP) and all applicable sections of the EPA's Transportation Conformity Rule.

BE IT FURTHER RESOLVED that the BCAG Board of Directors authorizes its staff to make any necessary changes to the RTP document to ensure the timely delivery of the RTP to the appropriate state and federal agencies;

PASSED AND ADOPTED by the Butte County Association of Governments on the 11th day of December 2008 by the following vote:

AYES:

Dolan, Connelly, Kirk, Josiassen, Yamaguchi, Arnold, Fichter, Jernigan, White

NOES:

None

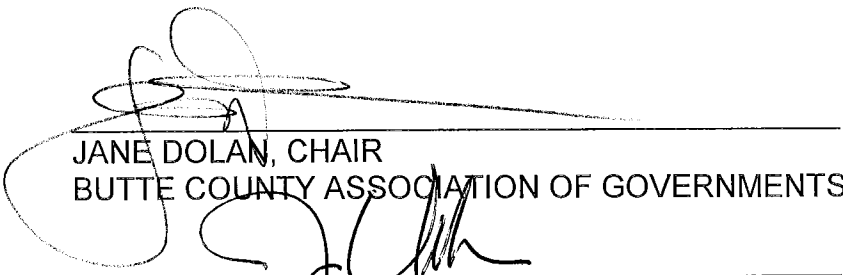
ABSENT:

Gruendl

ABSTAIN:

None

APPROVED:



JANE DOLAN, CHAIR
BUTTE COUNTY ASSOCIATION OF GOVERNMENTS

ATTEST:



JON A. CLARK, EXECUTIVE DIRECTOR
BUTTE COUNTY ASSOCIATION OF GOVERNMENTS

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
PURPOSE	1
BUTTE COUNTY'S AIR QUALITY STATUS	2
CONFORMITY CRITERIA AND PROCEDURES	3
REGIONAL EMISSIONS ANALYSIS AND FORECAST	12
AIR QUALITY CONFORMITY DETERMINATION.....	14
APPENDIX A – EXEMPT TRANSPORTATION PROJECT LIST	15
APPENDIX B – PUBLIC MEETING DOCUMENTATION.....	18
APPENDIX C – RESPONSE TO PUBLIC COMMENTS	19
APPENDIX D – CONFORMITY CHECKLIST	20

AIR QUALITY CONFORMITY ANALYSIS AND DETERMINATION - Final

Purpose

The Butte County Association of Governments (BCAG) is the designated Metropolitan Planning Organization (MPO) in Butte County, California, and is responsible for regional transportation planning. The purpose of this conformity determination is to ensure that BCAG's plans and programs "conform" to all applicable federal air quality requirements.

The Clean Air Act Section 176(c) (42 U.S.C. 7506 (c)) and EPA's transportation conformity regulations (40 CFR 93.104(b) and (c)) require that each new regional transportation plan (RTP) and transportation improvement plan (TIP) be demonstrated to conform to the State Implementation Plan (SIP) before the RTP and FTIP are approved by the MPO or accepted by the U.S. Department of Transportation (DOT). This ensures that federally supported highway and transit project activities will not cause new air quality violations, worsen existing violations, or delay timely attainment of the relevant national ambient air quality standards (NAAQS). Conformity currently applies under EPA's rules to areas that are designated non-attainment, and those re-designated to attainment after 1990 ("maintenance areas").

The last conformity determination was adopted by the BCAG Board of Directors on July 24, 2008 as part of the adoption of the 2009 Federal Transportation Improvement Program (FTIP), and relied on a previous emissions analysis pursuant to 40 CFR 93.122 (g). BCAG's last conformity determination that included a new regional emissions analysis was approved on December 16, 2004 for the 2004 Regional Transportation Plan (RTP).

EPA's transportation conformity rule (40 CFR 93.104(b) and (c)) requires that a new conformity determination be completed no less than every four years, including a new regional emissions analysis. Therefore, since the latest emissions analysis was completed and approved in 2004, BCAG is required to complete a new conformity determination in order to meet the requirements of 40 CFR 93.104.

This transportation air quality conformity determination shows that transportation projects programmed in the 2009 Butte County Federal Transportation Improvement Program (FTIP) and 2008 Regional Transportation Plan (RTP) are consistent with the applicable SIP.

Butte County's Air Quality Status

Ozone

Butte County is currently designated “basic subpart 1 non-attainment” for ozone under EPA’s 8-hour ozone rule. Because of this designation, transportation projects occurring within Butte County are subject to an air quality conformity determination for the ozone precursors Reactive Organic Gases (ROG) and Oxides of Nitrogen (NOx).

Previously, under EPA’s 1-hour ozone rule, Butte County was designated “non-attainment – transitional” (Section 185a) and was not required to develop an attainment SIP with an emissions budget.

Since no emissions budget exists from a prior SIP submittal that has been found adequate by EPA, or was part of an approved SIP, an interim conformity test applies. In order to make a conformity determination under the federal 8-hour standard, future emissions of ROG and NOx must be no greater than 2002 emissions levels, or the build/no-build test must be passed.

Carbon Monoxide

As a result of a 1998 SIP revision approved by EPA, Butte County (Chico Urbanized area) was redesignated from non-attainment to attainment with a Maintenance SIP for carbon monoxide (CO). In 2007, the 1998 Maintenance SIP was updated by ARB and approved by EPA for the second decade of the maintenance period. Conformity applies for CO through 2018. The current emission budget is for the second Maintenance SIP. As a maintenance area, BCAG continues to be required to demonstrate conformity for CO.

In order to show conformity for CO, BCAG must show that future emissions will be less than the CO emissions budget assigned to Butte County (budget test). Butte County’s emissions budget of 80-tons per day is specified in the *2004 Revision to the California State Implementation Plan for Carbon Monoxide*. EPA published a direct final rulemaking approving the plan on November 20, 2005, effective January 30, 2006. Based on the designated maintenance status, Butte County needs to demonstrate that vehicular emissions forecasts will not exceed 80 tons/day and are consistent with the applicable State Implementation Plan (SIP).

Conformity Criteria and Procedures

Planning Assumptions

The emissions estimates developed for this conformity determination were based on the latest planning assumptions available for Butte County in accordance with 40 CFR 93.110 of the Federal Conformity Rule. BCAG has the responsibility to develop estimates and forecasts of population, employment, travel, and congestion for the Regional Transportation Plan (RTP) and for preparation of the required air quality conformity emissions analysis and determination. Forecasts for population and employment are incorporated into the countywide transportation model database used by BCAG.

The initial modeling for the conformity analysis began in December 2007. A comprehensive update of the BCAG traffic model was recently completed in August 2008 and the population, housing, and employment projections identified in the 2008 Butte County RTP (Chapter 3) are the same as those used in the updated model. The model was validated in 2008 for the 2006 base year, and utilizes TransCAD V4.8 modeling software. The latest planning assumptions used in the transportation model validation and conformity analysis is summarized in Table 1.

Table 1
Summary of Latest Planning Assumptions for the BCAG Conformity Analysis

Assumption	Year and Source of Data (MPO Action)	Modeling	Next Scheduled Update
Population	Base Year: DOF 2006 Projections: based on the BCAG adopted Butte Regional Growth Projections 2006-2030 and extrapolated to 2035, the horizon year of the RTP.	Included in developing 2008 BCAG regional transportation model and future land use allocations.	Next update to population forecasts is anticipated to be in 2009
Employment	Base Year: 2002 ABI jobs data Projections: based on the BCAG adopted Butte Regional Growth Projections 2006-2030 and extrapolated to 2035, the horizon year of the RTP.	Included in developing 2008 BCAG regional transportation model and future land use allocations.	Next update to employment forecasts is anticipated to be in 2009
Traffic Counts	Base Year: 2006 The transportation model was validated to the base year using year 2006 traffic counts collected by Caltrans, local jurisdictions, and BCAG	2008 BCAG regional transportation model was validated using these counts.	Traffic counts are updated every 3 years, if funds are available.
Vehicle Miles of Travel	The transportation model was validated in 2008 to the 2006 base year.	TransCAD V4.8 is the model used to estimate VMT for the BCAG regional transportation model.	VMT is an output of the transportation model; VMT is affected by the RTP/FTIP project updates and is included in each new conformity analysis.
Speeds	The transportation model uses industry-standard volume delay curves. Baseline speeds are set according to posted speeds and the speeds are sensitive to the amount of traffic on the roadway segments.	TransCAD v4.8 and EMFAC 2007 V2.3	Posted speeds will be updated in the next transportation model validation, which has yet to be determined.
Vehicle Registration	EMFAC 2007 is the most recent model for use in California conformity analysis. Vehicle registration is included by ARB in the model and cannot be updated by the user.	EMFAC 2007 V2.3	The next update is scheduled to occur in 2010.

Socioeconomic Data

Population, housing, and employment projections were developed through the BCAG City/Town/County Planning Directors Group which includes representatives from all BCAG member jurisdictions as well as Local Agency Formation Commission (LAFCO) staff. BCAG used the Department of Finance (DOF) 2006 population estimates as the basis for the forecasts. In addition, 2002 Annual Business Inquiry (ABI) jobs data was incorporated for employment projections. The group met numerous times in order to reach consensus on the projections. The projections were summarized in the Butte Regional Growth Projections 2006-2030 which was adopted by BCAG in 2006. The projections were later extrapolated to 2035, the horizon year of the RTP. These projections are detailed in Chapter 3 of the 2008 RTP.

BCAG Transportation Model

The transportation conformity rule (TCR) section 93.122(b) requires the use of network-based transportation models for serious, severe, and extreme ozone non-attainment areas if their metropolitan planning region contains an urbanized population of more than 200,000. Butte County does not contain an urbanized area of that size, nor does it have an ozone classification of serious or greater. However, BCAG has used a network-based model in the past and has continued to with the recent transportation model update. The BCAG transportation model meets the requirements of TCR 93.122.

The BCAG transportation model is consistent in form and function with the standard traffic forecasting models used in the transportation planning profession. The model is a three step travel demand forecasting model consisting of Trip Generation, Trip Distribution, and Trip Assignment and produces forecasts for daily, AM peak hour, and PM peak hour conditions. In addition, the model is calibrated to traffic counts for what is conventionally termed a “typical workday”, which is defined as a Tuesday, Wednesday, or Thursday during a week with no holidays and when schools are in session. The model utilizes TransCAD 4.8 software, which is consistent with many of the models used by local jurisdictions in California and Caltrans.

Traffic Counts

The transportation model was validated to the 2006 base year using traffic count data collected from several sources including Caltrans, Butte County, and BCAG.

Speeds

The transportation model uses industry-standard volume delay curves as part of the traffic modeling process. The baseline speeds in the model are set according to the posted speeds and the speeds are sensitive to the amount of traffic on the roadway segments. For example, as roadway segment volumes increase, the link speed decreases

Speed distributions were updated in EMFAC 2007, using methodology approved by ARB and with information from the transportation model.

Transit

As with previous versions of the BCAG transportation model, there is no transit component in the current model. Transit mode share is less than 2% of the total travel in Butte County.

Land Use

The 2006 base year land use data for the model was developed from the Butte County parcel database which was verified with the cities, town, and county's existing land use, general plan, and zoning information where available along with 2006 aerial photos and field observations.

The transportation model's future year land use data was developed with the assistance of the local jurisdictions and represents build-out of existing adopted general plans and development of recognized future land use plan study areas. The six (6) jurisdictions in Butte County are at various stages of updating their local land use plans, of which, four (4) are currently updating their general plans. The general plan and specific plan development activities occurring in the county by the local jurisdictions are reflected in the future year land use assumptions, which are generally representative of the best available information as of June 30th, 2008.

The transportation model contains 912 transportation analysis zones (TAZ's) within which land use data is summarized into the following twenty categories:

- Rural Single-family Residential (dwelling units – du)
- Suburban Single-family Residential (du)
- Urban Single-family Residential (du)
- Suburban Multi-family Residential (du)
- Urban Multi-family Residential (du)
- Mobile Home (du)
- Neighborhood-Serving Retail (thousand square feet – ksf)
- Region Serving Retail (ksf)

- Industrial (ksf)
- Office (ksf)
- Medical Office (ksf)
- Hospital (ksf)
- Public-Quasi Public (ksf)
- Hotels (Rooms)
- University (students)
- Community College (students)
- K-12 Schools (students)
- Park (acres)
- Special Generator for Casino (slots)
- External Trip Distribution for Casino (trips)

Road Network

The roadway network is based on the BCAG centerline road network and contains all existing and future roadway classifications of “local” and above which were developed considering local jurisdictions circulation elements of their general plans. The road network includes all regionally significant roadways.

Future road networks prepared for emissions analysis include all regionally significant and non-regionally significant federally-funded, non-exempt projects. Tables 3-6 contain these non-exempt projects sorted by conformity analysis year. In addition, all projects within the FTIP/RTP that are exempt from conformity requirements have been documented (see Appendix A).

Validation/Calibration

The BCAG transportation model was validated to daily, AM and PM peak hour conditions. Detailed validation summary reports are available upon request. In general, the transportation model generates results that exceed the screenline and link volume validation standards established in Caltrans *Travel Forecasting Guidelines*, November 1992, and *Travel Model Improvement Program (TMIP) Model Validation and Reasonableness Checking Manual*, February 1997 for daily, AM and PM peak hour conditions.

BCAG Consultation and Planning Process

BCAG has followed the latest Final Transportation Conformity Rule in preparing the air quality conformity determination for the 2008 RTP. The Final Conformity Rule requires that Regional Transportation Planning Agencies (RTPAs) develop an Air Quality Conformity Element to identify the procedures and criteria for developing air quality conformity determinations for their respective regions.

As the Regional Transportation Planning Agency (RTPA) for Butte County, BCAG has established a broad planning process and partnership with federal, state, and local governments, the Butte County Air Quality Management District, and the general public.

This planning process and partnership includes consultation through our Transportation Advisory Committees that is comprised of representatives from all levels of local government, state and federal agencies, the air district, the general public, and other affected agencies and interested citizens in Butte County. The Transportation Advisory Committee typically meets on a monthly basis as needed to review and provide input into all BCAG planning activities. The technical issues are resolved at this level, and recommendations are made to the BCAG Board of Directors.

Specific Consultation

The transportation conformity document is required to be developed in consultation with BCAG's planning partners, and the opportunity must be provided for public review.

During the development of the air quality conformity analysis and determination, BCAG consulted with the **Interagency Consultation Review (ICR)** which reviewed and concurred with the emissions inventory, conformity analysis years, latest planning assumptions, project exemptions, as well as the methodology used to generate the emissions inventory. The ICR includes representatives from the Federal Highway Administration (FHWA), Environmental Protection Agency (EPA), Caltrans, Butte County Air Quality Management District and BCAG. The Federal Transit Administration was invited to participate as well. The interagency consultation process began on March 21, 2008 with a memorandum requesting confirmation of analysis years.

Further, a Project Development Team (PDT) was created to provide input on the development of the BCAG regional transportation model. The PDT includes representatives from local jurisdictions and Caltrans. The group reviewed all assumptions and inputs that went into the transportation model development.

BCAG staff provided a 30-day public review and comment period in compliance with BCAG's adopted Public Participation Plan (PPP). Legal notices were posted in local newspapers, and the conformity document was made available at local public libraries and on BCAG's website. The Air Quality Conformity Analysis and Determination were circulated among staff from Federal Highway Administration (FHWA), Environmental Protection Agency (EPA), Federal Transit Agency (FTA), and Caltrans. Appendices B and C contain copies of public notices and responses to public comments.

Financial Constraint

The 2009 FTIP and 2008 RTP have been financially constrained in accordance with the requirements of 40 CFR 93.108 and consistent with the U.S. DOT metropolitan planning regulations (23 CFR Part 450). See Financial Element of 2008 RTP for further details.

Transportation Control Measures

There are no TCMs in the CO SIP and there is no approved ozone SIP applicable to Butte County. Because there are no TCMs in an approved SIP for Butte County, Butte County currently has no TCMs in place and therefore timely TCM implementation requirements do not apply.

Vehicle Registrations

Butte County Association of Governments does not estimate vehicle registrations, age distributions or fleet mix. Rather, current forecasted estimates for these data are developed by the California Air Resources Board (CARB) and included in the EMFAC 2007 model. EMFAC 2007 Version 2.3 is the most recent model for use in California conformity analysis. Vehicle registrations, age distribution and fleet mix are developed and included in the model by CARB and cannot be updated by the user.

Modeling Documentation

A complete description of BCAG's transportation model is available upon request. BCAG's transportation model, which was used to develop transportation-related emissions for the Butte County non-attainment and maintenance areas, currently meets all requirements set forth in the August 15, 1997 Federal Register.

Emissions Models

In order to determine emissions associated with the implementation of the 2009 FTIP and 2008 RTP, the most recent emissions models were used. To develop the air quality conformity analysis, two models were used: the BCAG transportation model and EMFAC 2007 Version 2.3.

The BCAG transportation model was used to prepare the traffic model runs for the necessary analysis years. The BCAG transportation model produced forecasts of vehicle miles traveled (VMT), trip ends, speed distributions, lane miles, and other travel related data required for the emission models.

BCAG used the most current approved emissions model, EMFAC 2007 Version 2.3, to prepare the regional emissions analysis. In addition, BCAG followed CARB's methodology outlined in *Recommended Methods of Use of EMFAC2002 to Develop Motor Vehicle Emissions and Assess Conformity*. This methodology has not been updated for EMFAC 2007, but remains applicable.

Analysis Years

The regional emissions analysis begins with the base year of the RTP, 2008. The transportation conformity rule states that the next emissions analysis year cannot exceed five years from the year the RTP is adopted (2008); therefore the next year identified is 2010. The next analysis year is the attainment year for CO under the 80-tons-per-day budget which is 2018. The milestone year of 2025 is included since analysis is required between years can not be spread more than 10 years apart. The last year included in the emissions analysis is the long-range RTP horizon year of 2035.

A summary of the analysis years is indicated below:

- 2008 – Base year of RTP
- 2010 – No greater than five years from RTP adoption year
- 2018 – CO maintenance year (new 80 tons-per-day budget)
- 2025 – Milestone year no more than 10 years from last analysis
- 2035 – Horizon year of the long-range RTP

Projects Included in the Regional Emissions Analysis

The 2008 RTP includes all federal and non-federal regionally significant projects expected to occur in the Butte County ozone non-attainment area and Chico Urbanized Area carbon monoxide maintenance area. Projects included in this emissions analysis include all relevant projects contained in the 2008 RTP that are assumed funded, as well as all relevant projects in the 2009 FTIP (see tables below). The projects are those receiving federal transportation dollars as well as those that have been determined to be regionally significant regardless of funding type. All capacity increasing projects have been included in this conformity analysis as required by the Transportation Conformity Rule. The funding sources for which the specific list of projects is derived are listed in Table 2 below.

Table 2
RTP and FTIP Project Funding Sources

APDE	Advanced Project Development Element (Derived from RIP/STIP)
CMAQ	Congestion Mitigation and Air Quality
CRTP	California Recreation Trails Program
HBRR	Highway Bridge Repair and Replacement Program
IIP	Interregional Improvement Program (Derived from STIP)

Local	Local Agency Funds (City/County funds)
PLH	Public Lands Highway Program
RIP	Regional Improvement Program (Derived from STIP)
SHOPP	State Highway Operations and Protection Program

The specific capacity-increasing projects included in each analysis year in the emissions analysis are included below in Tables 3, 4, 5 and 6. It is important to note that the 2018 model includes all projects listed in Table 3, and the 2025 model includes all projects listed in Tables 3 and 4, while the 2035 model includes all projects in Tables 3 through 5.

**Table 3
Capacity-increasing Projects Included in 2010 Emissions Analysis**

Jurisdiction	Roadway	Segment	Proposed Improvement
Butte County	SR 149	SR 99 to SR 70	Widen to 4 lanes
Butte County	SR 70	Cox Ln to East Gridley Rd	Widen to 4 lanes
Butte County	SR 70	SR 162 to Ophir Rd	Widen to 4 lanes
Chico	SR 99	SR 32 to E. 1st Ave	Auxiliary lanes
Chico	Notre Dame	E. 20 th St to Little Chico Creek	Construct 2 lane roadway
Chico	Cohasset Rd	Two Oaks Dr to Thorntree Dr	Widen to 4 lanes
Chico	Eaton Rd	Floral Ave to Manzanita Ave	Construct 4 lane roadway

**Table 4
Capacity-increasing Projects Included in 2018 Emissions Analysis***

Jurisdiction	Roadway	Segment	Proposed Improvement
Butte County	SR 70	Ophir Rd to Palermo Rd	Widen to 4 lanes
Chico	Fair St	Fair St (end) to Entler Ave	Construct 2 lane roadway
Chico	E. 20 th St	Forest Ave to Bruce Rd	Widen to 4 lanes
Chico	Bruce Rd	Skyway to SR 32	Widen to 4 lanes
Chico	SR 32	SR 99 to Yosemite Dr	Widen to 4 lanes
Chico	SR 99	Skyway to SR 32	Auxiliary lanes
Chico	Notre Dame	Comanche Creek to Southgate Ln	Construct 2 lane roadway
Chico	Cohasset Rd	Airport Blvd to Eaton Rd (remainder)	Widen to 4 lanes
Chico	Eaton Rd	SR 99 to Cohasset Rd	Widen to 4 lanes
Chico	W. Eaton Rd	SR 32 to W Eaton Rd (end)	Construct 2 lane roadway
Chico	W. Eaton Rd	Rogue River Dr to Esplanade	Widen to 4 lanes
Chico	Midway	Hegan Ln to E. Park Ave	Widen to 4 lanes

*Also includes all projects listed in Table 3.

**Table 5
Capacity-increasing Projects Included in 2025 Emissions Analysis***

Jurisdiction	Roadway	Segment	Proposed Improvement
Butte County	SR 70	Palermo Rd to Cox Ln	Widen to 4 lanes
Chico	Manzanita Ave	E. 8 th St to Wildwood Ave	Widen to 4 lanes

Chico	Esplanade	Eaton Rd to Nord Hwy	Widen to 4 lanes
Chico	Southgate	Midway to Skyway & Entler Ave to Player Ln	Construct 2 lane roadway

*Also includes all projects listed in Tables 3 and 4.

**Table 6
Capacity-increasing Projects Included in 2035 Emissions Analysis***

Jurisdiction	Roadway	Segment	Proposed Improvement
Butte County	SR 70	Central House Rd to Yuba County	Widen to 4 lanes

*Also includes all projects listed in Tables 3, 4 and 5.

Eight-hour Ozone Standard

On June 15, 2004 U.S. EPA promulgated the new 8-hour federal ozone standard. Based on this standard, Butte County is designated “basic subpart 1” non-attainment. This new standard took effect June 15, 2005, at which time the old 1-hour standard was revoked.

The conformity test to be used to demonstrate conformity to the federal 8-hour standard is the “no-greater-than 2002” test whereby future emissions must be less than or equal to those emission present in 2002.

Carbon Monoxide “Budget Test”

Upon being redesignated from “non-attainment” to “maintenance” for carbon monoxide in 1998, BCAG was allocated a countywide emissions budget of 100 tons per day. As part of a July 2004 revision to the California State Implementation Plan (SIP) for Carbon Monoxide, Butte County’s CO emissions budget was changed to 80 tons per day.

The conformity test to be used to demonstrate conformity for CO is the “budget test” whereby CO emissions are not to exceed the 80 tons per day budget.

Regional Emissions Analysis and Forecast

The regional emissions analysis and forecast for ozone precursors and carbon monoxide is summarized in the following tables. The summary of emissions forecasts is derived from outputs of the EMFAC 2007 Version 2.3 model. These tables show comparisons of:

- ROG: Reactive Organic Gases as an ozone precursor
- NOx: Oxides of Nitrogen as an ozone precursor
- CO: Carbon Monoxide

Ozone 8-hour Standard Test – No-greater-than- 2002 Test

**Table 7
ROG “No-greater-than-2002” Emissions Test**

ROG (EMFAC 2007 Summer Run) - TONS PER DAY OF EMISSIONS			
Analysis Year	ROG Emissions	Less than 2002?	Pass Conformity Test?
2002	7.32	--	--
2008	5.30	YES	YES
2010	4.70	YES	YES
2018	2.69	YES	YES
2025	1.94	YES	YES
2035	1.47	YES	YES

**Table 8
NOx “No-greater-than-2002” Emissions test**

NOx (EMFAC 2007 Summer Run) - TONS PER DAY OF EMISSIONS			
Analysis Year	NOx Emissions	Less than 2002?	Pass Conformity Test?
2002	10.67	--	--
2008	10.39	YES	YES
2010	9.59	YES	YES
2018	4.99	YES	YES
2025	3.34	YES	YES
2035	2.80	YES	YES

Carbon Monoxide Budget Test

**Table 9
CO “Budget Test” Emissions Test 80 Tons-per-day Budget**

CO (EMFAC 2007 Winter Run) - TONS PER DAY OF EMISSIONS			
Analysis Year	CO Emissions	CO Budget	Pass Conformity Test?
2008	44.39	80.00	YES
2010	38.60	80.00	YES
2018	19.36	80.00	YES
2025	12.47	80.00	YES
2035	9.82	80.00	YES

Air Quality Conformity Determination

The results from this conformity analysis show that current and future emissions of the ozone precursors ROG and NO_x will be less than the 2002 emissions levels, and current and future carbon monoxide emissions will be below their budget threshold of 80 tons per day. Thus, Butte County, in accordance with the Transportation Conformity Rule requirements applicable to Butte County (§51.464 and §51.436 – 51.440), has satisfied the requirements of the “no-greater-than-2002” test for federal 8-hour ozone standard, and the “budget test” for carbon monoxide for the 80-tons-per-day budget. **Based on this analysis, the 2009 Federal Transportation Improvement Program (FTIP) and 2008 Regional Transportation Plan conforms to the applicable State Implementation Plan (SIP) and all applicable sections of the EPA’s Transportation Conformity Rule.**

APPENDIX A
EXEMPT TRANSPORTATION PROJECT LIST

(See pages 16 and 17)

BCAG Exempt Project Listing

(costs in thousands)

AGENCY	MP# ID	Case ID	Title	Proj. Description	Total Proj. Cost	Exemption Description	Exemption Code
Blags, City of	08RTPS-12	1020000137	Pedestrian and Bikeway Intermodal sys. Phase 2	TE Project in the City of Blags in Butte Co. on Albut Street, Barnook Street, Third Street, Fourth Street and E Street. Installation of Sidewalks, curbs & gutters.	319	Bicycle and pedestrian facilities.	3.02
Butte County	08RTPS-12	2020000056	Local HBR - Lump Sum	Local Bridge lump sum grouping. All projects are exempt from AO Conformity. Bridge No. (12C0276, 12C0120, 12C0180, 12C0234, 12C0244, 12C0282, 12C0341) See MPO Notes for locations	28,321	Widening narrow pavements or reconstructing bridges (no additional travel lane s).	1.19
Butte County	08RTPS-12	2020000062	Butte County Safe Routes To Schools	Butte County SRTS Project. Golden Hills & Helen Wilcox Elementary Schools Neighborhood Pedestrian Improvements. Plan, program and monitor	281	Bicycle and pedestrian facilities.	3.02
Butte County Association of Governments	08RTPS-12	1020000020	Plan, program and monitor	Plan, program and monitor	704	Specific activities which do not involve or lead directly to construction.	4.01
Butte County Association of Governments	08RTPS-12	2020000005	FTA Sec. 5307 Program - B - Line	Butte Regional Transit - Chico, UZA Area, Operations and Capital	39,276	Operating assistance to transit agencies.	2.01
Butte County Association of Governments	08RTPS-12	2020000008	FTA Sec. 5311 Program	B - Line (Butte Regional Transit) Operations and Capital	17,564	Operating assistance to transit agencies.	2.01
Butte County Association of Governments	08RTPS-12	2020000047	SR 70 @ Georgia Pacific Way Interchange	Planning and Technical studies for interchange project at SR 70 @ Georgia Pacific Way in Oroville. Project approved in SAFETY-LU.	1,847	Specific activities which do not involve or lead directly to construction.	4.01
Butte County Association of Governments	08RTPS-12	2020000060	Butte 99 Chico Ave. Lanes Interchange Phase 2	Chico, On SR 99 at East 1st Ave. Widening ramp at E. 1st Ave. & construct intersection improvements (Phase 2)	39,520	Widening narrow pavements or reconstructing bridges (no additional travel lane s).	1.19
Butte County Association of Governments	08RTPS-12	2020000063	B Line Farebox Project - Phase 2	Butte Regional Transit - Purchase and install farebox system on paratransit fleet.	300	Purchase of operating equipment for vehicles (e. g. radios, fareboxes, lbs, etc.).	2.05
Butte County Association of Governments	08RTPS-13	1020000118	PH 171 Reconstruction Project - Phase 1	In Butte County - on Forest Highway 171 (Upper Skyway) between Insko and Butte Meadows. Reconstruct existing roadway. Phase 1 entails construction between Insko and Hurlburg Rd.	12,223	Pavement resurfacing and/or rehabilitation.	1.10
Butte County Association of Governments	08RTPS-13	2020000072	PH 171 Reconstruction Project - Phase 2	In Butte County on Forest Highway 171 (Upper Skyway) between Insko and Butte Meadows. Reconstruct existing roadway. Phase 2 is for Hurlburg to Butte Meadows	10,130	Pavement resurfacing and/or rehabilitation.	1.10
Butte County Association of Governments	08FTPCMA	2020000073	Butte Regional Transit B-Line AVLGPS	Butte Regional Transit - Purchase and install AVLGPS System for transit fleet.	700	Purchase of operating equipment for vehicles (e. g. radios, fareboxes, lbs, etc.).	2.05
Caltrans	08RTPS-12	1020000065	Butte 99 Gridley Over Improvments	Gridley, on Route 99 from Gridley Road to Spruce Street. Widened to 5 lanes.	6,520	Adding medians.	1.16
Caltrans	08RTPS-12	1020000112	SHOFP Roadway Preservation Lump Sum Project	Lump Sum SR 99 Near Boggs - Rio Bonito to SR 162 - Rehabilitate Roadway. Project is exempt from conformity	29,514	Pavement resurfacing and/or rehabilitation.	1.10
Caltrans	08RTPS-12	2020000059	Butte SR 70 Passing Lane Project	Near East Gridley Rd in Butte County. Construct passing lanes from 0.7 mile south of East Gridley Rd to 0.4 mile north of Cox Lane.	23,000	Widening narrow pavements or reconstructing bridges (no additional travel lane s).	1.19
Caltrans	08RTPS-13	1020000136	SHOFP Bridge Preservation Grouped Projects	Near Oroville and Chico - Bridges #12-014R/L and on SR 182 @ Bridge #12-0031 ; AL West Branch Fbr/River Br. #12-134 Seismic Retrofit. SR 99 @ Butte Cr Bridge #12-012BR Scour Mitigation	45,484	Safety Improvement Program.	1.06
Caltrans	08RTPS-14	2020000053	SHOFP Collision Reduction Lump Sum	EA 4E130 SR 70 Near Oroville. 1 mile south of SR 162 to 1 mi north of Garden Drive. Upgrade guardrail and gore areas. Project also includes \$2million of OTS funds.	20,686	Guardrails, median barriers, crash cushions.	1.09
Chico, City of	08RTPS-12	2020000051	SR 99 @ Skyway Interchange	In the City of Chico. CMAQ operational improvements to reconfigure interchange and improve travel flow.	5,000	Interchange reconfiguration projects	5.04
Chico, City of	08RTPS-12	2020000066	SR 99 Coliaset Interchange Operational Improvement	In the City of Chico, project constructs a direct on-ramp from EB Coliaset Rd to Southbound SR 99 and removes the existing left turn movements at Coliaset Rd. Project reconfigures interchange.	10,450	Interchange reconfiguration projects	5.04

11/14/2008

AGENCY	MPO ID	CMSA ID	Title	Proj. Description	Total Cost	Exemption Description	Exemption Code
Chico, City of	08RTPS-12	2020000066	SR 99 Eaton Rd Signalization Project	In the City of Chico at Eaton Rd. Installation of traffic signals and stop movements at east and west on/off ramps. Project also completes PSR. PAISED of ultimate project of replacing interchange	2,348	Intersection signalization projects at individual intersections.	5.02
Chico, City of	08RTPS-12	2020000071	Blowell Park Middle Trail Rehabilitation Project	Rehabilitation of Middle Trail in Upper Blowell Park. 3.3 miles trail rehab with new signs at Horseshoe Lake and Middle Trail Rests. 710 of new ADA access	223	Bicycle and pedestrian facilities.	3.02
Chico, City of	08RTPS-13	2020000064	SR 99 Corridor Bikeway Project	In the City of Chico thru the urbanized area construct class 1 and class 2 bikeway from south Chico at Southgate Avenue to North Chico at Hicks Lane along SR 99 Corridor including local streets.	1,500	Bicycle and pedestrian facilities.	3.02
Oroville, City of	08RTPS-12	1020000126	SR 70 and Montgomery Street Beautification Project	TE Project in the City of Oroville, on and off ramps at Rte 70 and Montgomery St. Install landscaping, curb and gutter, sidewalks. Phase 2	400	Plantings, landscaping, etc.	4.09
Oroville, City of	08RTPS-14	2020000052	Spencer Ave B-Line Transit Center Project	In the City of Oroville. Develop transit center improvements on Spencer Ave. Includes new structure and needed roadway improvements.	2,156	Bus terminals and transfer points	5.06
Paradise, City of	08RTPS-12	2020000061	Paradise 3 E's - Safe Routes to Schools	Town of Paradise 3 E's. This is a non construction project for Education, Enforcement and Enforcement for the Town's Safe Routes to Schools Program.	66	Specific activities which do not involve or lead directly to construction.	4.01
Paradise, City of	08RTPS-12	2020000068	Pearson Rd Park and Ride Project	Between Almond Street and Black Olive. Construct park and ride lot, bus shelter, bike racks and other amenities to provide alternative to SOV and reduce vehicle emissions.	223	Bus terminals and transfer points	5.06
Paradise, City of	08RTPS-13	2020000067	Pearson and Recreation Drive Signalization Project	Signalize intersection and add pedestrian and bicycle lane improvements. Project limits Pearson Rd 1500 feet in each direction, Recreation and Churchill Drive 500 feet each direction.	1,425	Intersection signalization projects at individual intersections.	5.02
Various Agencies	08RTPS-12	2020000024	FTA 5310	Capital competitive grant - Lump Sum item. Includes Work Training Center and Paradise Express. Funds for capital costs.	2,418	Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet.	2.10
Various Agencies	08RTPS-12	2020000070	Butte County HSIP Lump Sum	Highway Safety Improvement Program (HSIP). Safety index projects. Butte County on Lincoln Blvd from Elgin St to Arnold and Oroville, at C of SR 160 and Yeatch St. See MPO comments for description	2,475	Safety Improvement Program.	1.06

11/14/2008

APPENDIX B

PUBLIC MEETING DOCUMENTATION

PUBLIC NOTICE

Of Public Review Period and Public Hearing on the Draft 2008 Butte County Regional Transportation Plan & Air Quality Conformity Analysis and Determination, and Amendment to the 2009 Federal Transportation Improvement Program for the Purpose of including the Air Quality Conformity Analysis and Determination

NOTICE IS HEREBY GIVEN that the Butte County Association of Governments (BCAG) will hold a public hearing on Thursday, October 23, 2008 at 9:00 a.m. at the City of Chico Council Chambers located in the Chico Municipal Building, Council Chambers, 421 Main Street in Chico regarding the draft 2008 Regional Transportation Plan (RTP), the Air Quality Conformity Analysis and Determination and the 2009 Federal Transportation Improvement Program (FTIP).

- The RTP is the long-term transportation planning document for Butte County.
- The FTIP is a listing of capital improvements and operational expenditures utilizing federal and state monies for transportation projects in Butte County during the next four years. Amendment to the FTIP is proposed for the purpose of incorporating the Air Quality Conformity Analysis and Determination to ensure consistency between the RTP and the FTIP.
- The Air Quality Conformity Analysis and Determination contains the documentation to support a finding that the 2009 FTIP and the 2008 RTP meet the air quality conformity requirements applicable to Butte County.

A formal 30 day public review and comment period will commence on September 23 and conclude at the public hearing on October 23, 2008. The draft documents are available for review at the BCAG office located at 2580 Sierra Sunrise Terrace, Suite 100, Chico CA 95928 and posted on the BCAG web page at www.bcag.org. Copies are also available at each Butte County Public Library. Public comments are welcomed at the hearing, or may be submitted in writing by 5:00 p.m. on October 23, 2008 to Ivan Garcia at the above address.

After considering the comments, the documents will be considered for adoption by resolution by the BCAG Board of Directors at a Board meeting to be held on December 11, 2008 at 9:00 a.m. in the Chico Municipal Building, Council Chambers, 421 Main Street (Note: Due to the holidays, this is not a regularly scheduled meeting date).

Comments and questions can be directed to Mr. Iván García, Programming Manager for the Butte County Association of Governments at 2580 Sierra Sunrise Terrace, Suite 100, Chico CA 95928. Comments may also be phoned in to 530-879-2468, or emailed to igarcia@bcag.org.

APPENDIX C
RESPONSES TO PUBLIC COMMENTS

No Public Comments Received

APPENDIX D

CONFORMITY CHECKLIST

FHWA Checklist for MPO TIPs/RTPs Checklist/Version Date: June 27, 2005

40 CFR	Criteria	Page	Comments
§93.102	Document the applicable pollutants and precursors for which EPA designates the area as nonattainment or maintenance. Describe the nonattainment or maintenance area and its boundaries.	p. 2	
§93.104 (b, c)	Document the date that the MPO officially adopted, accepted or approved the TIP/RTP and made a conformity determination. Include a copy of the MPO resolution. Include the date of the last prior conformity finding.	p. 1	
§93.104 (e)	If the conformity determination is being made to meet the timelines included in this section, document when the new motor vehicle emissions budget was approved or found adequate.	N/A	
§93.106 (a)(2)ii	Describe the regionally significant additions or modifications to the existing transportation network that are expected to be open to traffic in each analysis year. Document that the design concept and scope of projects allows adequate model representation to determine intersections with regionally significant facilities, route options, travel times, transit ridership and land use.	p. 5-7 p. 11-12 Tables 3-6	
§93.108	Document that the TIP/RTP is financially constrained (23 CFR 450).	p. 9	
§93.109 (a, b)	Document that the TIP/RTP complies with any applicable conformity requirements of air quality implementation plans (SIPs) and court orders.	p. 14	
§93.109 (c-k)	Provide either a table or text description that details, for each pollutant and precursor, whether the interim emissions tests and/or the budget test apply for conformity. Indicate which emissions budgets have been found adequate by EPA, and which budgets are currently applicable for what analysis years.	p. 10-13	
§93.110 (a, b)	Document the use of latest planning assumptions (source and year) at the "time the conformity analysis begins," including current and future population, employment, travel and congestion. Document the use of the most recent available vehicle registration data. Document the date upon which the conformity analysis was begun.	p. 3&4 Table 1	
USDOT/EPA guidance	Document the use of planning assumptions less than five years old. If unable, include written justification for the use of older data. (1/18/02)	p. 3-5	
§93.110 (c,d,e,f)	Document any changes in transit operating policies and assumed ridership levels since the previous conformity determination. Document the use of the latest transit fares and road and bridge tolls. Document the use of the latest information on the effectiveness of TCMs and other SIP measures that have been implemented. Document the key assumptions and show that they were agreed to through Interagency and public consultation.	p. 6-9	No TCMs
§93.111	Document the use of the latest emissions model approved by EPA.	p. 9&10	
§93.112	Document fulfillment of the interagency and public consultation requirements outlined in a specific implementation plan according to §51.390 or, if a SIP revision has not been completed, according to §93.105 and 23 CFR 450. Include documentation of consultation on conformity tests and methodologies as well as responses to written comments.	p. 6-8	
§93.113	Document timely implementation of all TCMs in approved SIPs. Document	p. 9	No TCMs

40 CFR	Criteria	Page	Comments
	that implementation is consistent with schedules in the applicable SIP and document whether anything interferes with timely implementation. Document any delayed TCMs in the applicable SIP and describe the measures being taken to overcome obstacles to implementation.		
§93.114	Document that the conformity analyses performed for the TIP is consistent with the analysis performed for the Plan, in accordance with 23 CFR 450.324(f)(2).	p. 1	
§93.118 (a, c, e)	<u>For areas with SIP budgets:</u> Document that emissions from the transportation network for each applicable pollutant and precursor, including projects in any associated donut area that are in the Statewide TIP and regionally significant non-Federal projects, are consistent with any adequate or approved motor vehicle emissions budget for all pollutants and precursors in applicable SIPs.	p. 10-13	
§93.118 (b)	Document for which years consistency with motor vehicle emissions budgets must be shown.	p. 10	
§93.118 (d)	Document the use of the appropriate analysis years in the regional emissions analysis for areas with SIP budgets, and the analysis results for these years. Document any interpolation performed to meet tests for years in which specific analysis is not required.	p. 10-13	
§93.119 ⁱ	<u>For areas without applicable SIP budgets:</u> Document that emissions from the transportation network for each applicable pollutant and precursor, including projects in any associated donut area that are in the Statewide TIP and regionally significant non-Federal projects, are consistent with the requirements of the “Action/Baseline”, “Action/1990” and/or “Action/2002” interim emissions tests as applicable.	p. 12&13	
§93.119 (g)	Document the use of the appropriate analysis years in the regional emissions analysis for areas without applicable SIP budgets.	p. 10	
§93.119 (h,i)	Document how the baseline and action scenarios are defined for each analysis year.	p. 10	
§93.122 (a)(1)	Document that all regionally significant federal and non-Federal projects in the nonattainment/maintenance area are explicitly modeled in the regional emissions analysis. For each project, identify by which analysis it will be open to traffic. Document that VMT for non-regionally significant Federal projects is accounted for in the regional emissions analysis	p. 7, 10-12	
§93.122 (a)(2, 3)	Document that only emission reduction credits from TCMs on schedule have been included, or that partial credit has been taken for partially implemented TCMs. Document that the regional emissions analysis only includes emissions credit for projects, programs, or activities that require regulatory action if: the regulatory action has been adopted; the project, program, activity or a written commitment is included in the SIP; EPA has approved an opt-in to the program, EPA has promulgated the program, or the Clean Air Act requires the program (indicate applicable date). Discuss the implementation status of these programs and the associated emissions credit for each analysis year.	p. 9	No TCMs
§93.122 (a)(4,5,6)	For nonregulatory measures that are not included in the STIP, include written commitments from appropriate agencies. Document that assumptions for measures outside the transportation system (e.g. fuels measures) are the same for baseline and action scenarios. Document that factors such as ambient temperature are consistent with those used in the SIP unless modified through interagency consultation.	p. 9-10	
§93.122 (b)(1)(i) ⁱⁱ	Document that a network-based travel model is in use that is validated against observed counts for a base year no more than 10 years before the	p. 5	

40 CFR	Criteria	Page	Comments
	date of the conformity determination. Document that the model results have been analyzed for reasonableness and compared to historical trends and explain any significant differences between past trends and forecasts (for per capita vehicle-trips, VMT, trip lengths mode shares, time of day, etc.).		
§93.122 (b)(1)(ii) ²	Document the land use, population, employment, and other network-based travel model assumptions.	p. 4-7	
§93.122 (b)(1)(iii) ²	Document how land use development scenarios are consistent with future transportation system alternatives, and the reasonable distribution of employment and residences for each alternative.	p. 5-7	
§93.122 (b)(1)(iv) ²	Document use of capacity sensitive assignment methodology and emissions estimates based on a methodology that differentiates between peak and off-peak volumes and speeds, and bases speeds on final assigned volumes.	p. 5&6	
§93.122 (b)(1)(v) ²	Document the use of zone-to-zone travel impedances to distribute trips in reasonable agreement with the travel times estimated from final assigned traffic volumes. Where transit is a significant factor, document that zone-to-zone travel impedances used to distribute trips are used to model mode split.	p. 5-7	
§93.122 (b)(1)(vi) ²	Document how travel models are reasonably sensitive to changes in time, cost, and other factors affecting travel choices.	p. 5-7	
§93.122 (b)(2) ²	Document that reasonable methods were used to estimate traffic speeds and delays in a manner sensitive to the estimated volume of travel on each roadway segment represented in the travel model.	p. 5&6	
§93.122 (b)(3) ²	Document the use of HPMS, or a locally developed count-based program or procedures that have been chosen through the consultation process, to reconcile and calibrate the network-based travel model estimates of VMT.	p. 5&7	
§93.122 (d)	In areas not subject to §93.122(b), document the continued use of modeling techniques or the use of appropriate alternative techniques to estimate vehicle miles traveled	p. 5	
§93.122 (e, f)	Document, in areas where a SIP identifies construction-related PM10 or PM 2.5 as significant pollutants, the inclusion of PM10 and/or PM 2.5 construction emissions in the conformity analysis.	N/A	
§93.122 (g)	If appropriate, document that the conformity determination relies on a previous regional emissions analysis and is consistent with that analysis.	N/A	
§93.126, §93.127, §93.128	Document all projects in the TIP/RTP that are exempt from conformity requirements or exempt from the regional emissions analysis. Indicate the reason for the exemption (Table 2, Table 3, traffic signal synchronization) and that the interagency consultation process found these projects to have no potentially adverse emissions impacts.	p. 8 App. A	

ⁱ Note that some areas are required to complete both interim emissions tests.

ⁱⁱ 40 CFR 93.122(b) refers only to serious, severe and extreme ozone areas and serious CO areas above 200,000 population

Disclaimers

This checklist is intended solely as an informational guideline to be used in reviewing Transportation Plans and Transportation Improvement Programs for adequacy of their conformity documentation. It is in no way intended to replace or supercede the Transportation Conformity regulations of 40 CFR Parts 51 and 93, the Statewide and Metropolitan Planning Regulations of 23 CFR Part 450 or any other EPA, FHWA or FTA guidance pertaining to transportation conformity or statewide and metropolitan planning. This checklist is not intended for use in documenting transportation conformity for individual transportation projects in nonattainment or maintenance areas. 40 CFR Parts 51 and 93 contain additional criteria for project-level conformity determinations.

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