

## Caltrans Air Quality and Conformity Glossary

---

|                 |  |
|-----------------|--|
| ARB (or CARB)   | <a href="#">California Air Resources Board</a> . The primary air regulator in California, responsible for activities under both the California and Federal Clean Air Acts. Designed and maintains the <a href="#">EMFAC</a> on-road mobile source emission model used for most highway-related air quality analyses in California. <a href="http://www.arb.ca.gov/">http://www.arb.ca.gov/</a>   |
| ADL             | Aerially Deposited Lead. Lead that has deposited into soil, primarily from use of leaded gasoline prior to the 1990s. Most common source of potential airborne lead contamination from highway projects, if ADL-contaminated soil is disturbed causing fugitive dust.  |
| APCD            | Air Pollution Control District. This is a special district set up under the general California Clean Air Act requirements for local regulation. Unless included in an <a href="#">AQMD</a> , each county has an APCD. In some cases, counties may form a Joint Powers type of organization covering multiple counties that is called a Unified APCD, such as <a href="#">San Joaquin Valley APCD</a> which covers 7 ½ counties (Kern County is split), and the <a href="#">Great Basin</a> and <a href="#">Monterey Bay Unified</a> APCDs which cover 3 counties each. See: <a href="http://www.arb.ca.gov/capcoa/roster.htm">http://www.arb.ca.gov/capcoa/roster.htm</a>  |
| AQMD            | Air Quality Management District. This is a special district set up by specific State legislation to regulate air quality in a county or multiple counties. Unlike most <a href="#">APCDs</a> , AQMD boundaries do not have to follow county lines. See: <a href="http://www.arb.ca.gov/capcoa/roster.htm">http://www.arb.ca.gov/capcoa/roster.htm</a>  |
| Attainment Area | <p>An area that attains a <a href="#">NAAQS</a> or <a href="#">CAAQS</a>. Attainment areas may be:</p> <ul style="list-style-type: none"><li>• <i>Attainment/Unclassified</i> (“<i>Unclassifiable</i>” in some lists), which have never violated the air quality standard of interest or don’t have enough monitoring data to establish attainment or nonattainment status; or</li><li>• <i>Attainment-Maintenance</i> (<a href="#">NAAQS</a> only), which violated a <a href="#">NAAQS</a> that is currently in use (was <a href="#">Nonattainment</a>) in or after 1990, but now attains the standard and is officially redesignated to Attainment by <a href="#">U.S. EPA</a> with a <a href="#">Maintenance SIP</a>; or</li><li>• <i>Attainment</i> (usually only for <a href="#">CAAQS</a>, but sometimes for <a href="#">NAAQS</a>), which have adequate monitoring data to show attainment, have never been nonattainment, or, for <a href="#">NAAQS</a>, have completed the official <a href="#">Maintenance</a> period.</li></ul> <p><a href="#">EPA</a> and <a href="#">ARB (CARB)</a> usually don’t list Attainment-Maintenance areas separately; they must be identified using the <a href="#">EPA Green Book</a> or information maintained by Caltrans.</p> |

---

*This list describes the general meaning of various terms and acronyms used in the air quality analysis and transportation conformity processes. The definitions have no official standing as Department policy, and are provided for general information only.*

## Caltrans Air Quality and Conformity Glossary

---

|                 |   |
|-----------------|---|
| AQAP            | Attainment Plan or Air Quality Attainment Plan. For Federal purposes, this is an Attainment <a href="#">SIP</a> : a <a href="#">SIP</a> that demonstrates how a <a href="#">Nonattainment Area</a> will attain a specific <a href="#">NAAQS</a> in a specific attainment year. For State purposes, this is a plan that addresses steps to be taken toward attainment of the relevant <a href="#">CAAQS</a> in an air pollution control district ( <a href="#">APCD</a> ) or air quality management district ( <a href="#">AQMD</a> ).   |
| BACM            | Best Available Control Measures. These are emission control measures that must be researched and, as feasible and effective, implemented in <a href="#">PM10</a> and <a href="#">PM2.5 SIPs</a> for Serious nonattainment areas. BACM measures applicable to transportation must be tracked for “timely implementation” purposes similarly to <a href="#">RACM</a> and <a href="#">TCMs</a> .   |
| CAA<br>(FCAA)   | Federal Clean Air Act. The fundamental air quality law for the U.S., administered by <a href="#">EPA</a> . Originally passed in the late 1960s, with comprehensive amendments in 1977 and 1990.   |
| CAAA<br>(FCAAA) | Federal Clean Air Act Amendments of 1990. The most recent comprehensive revision of the <a href="#">Federal Clean Air Act</a> . The current transportation <a href="#">conformity</a> process was instituted as part of the 1990 amendments.  |
| CAAQS           | California Ambient Air Quality Standard. California standards set ambient air quality standards under the California Clean Air Act. California standards are usually more stringent than Federal standards ( <a href="#">NAAQS</a> ), but do not have a <a href="#">conformity</a> process associated with them. CAAQS must be covered in <a href="#">CEQA</a> documents.   |
| CALCOG          | <a href="#">California Association of Councils of Government</a> . Trade, coordination, and lobbying organization of California Councils of Government including most <a href="#">MPOs</a> and <a href="#">RTPAs</a> . <a href="http://www.calcog.org/">http://www.calcog.org/</a>  |
| Caltrans        | <a href="#">The California Department of Transportation</a> . This is the state agency responsible for surface transportation funding of the state highway system, public transit, and in-state passenger rail service, and project delivery on the state highway system. Caltrans is responsible for statewide <a href="#">conformity</a> documentation for the <a href="#">FSTIP</a> and, if project-specific, the <a href="#">State Transportation Plan</a> . Caltrans is also responsible for carrying out <a href="#">conformity</a> analysis for regionally significant projects in Isolated Rural areas. <a href="http://www.dot.ca.gov/">http://www.dot.ca.gov/</a> |
| CAPCOA          | <a href="#">California Air Pollution Control Officers Association</a> . Trade, coordination and lobbying organization of California <a href="#">APCDs</a> and <a href="#">AQMDs</a> . Publishes guidance documents agreed to by most <a href="#">APCDs</a> and <a href="#">AQMDs</a> for some types of analysis where official regulations or guidance by <a href="#">ARB</a> or <a href="#">EPA</a> have not been finalized. <a href="http://www.capcoa.org/">http://www.capcoa.org/</a>   |

---

*This list describes the general meaning of various terms and acronyms used in the air quality analysis and transportation conformity processes. The definitions have no official standing as Department policy, and are provided for general information only.*

## Caltrans Air Quality and Conformity Glossary

---

|                                       |  |
|---------------------------------------|--|
| CE                                    | Categorical Exclusion (Federal – for <a href="#">NEPA</a> ) or Categorical Exemption (State – for <a href="#">CEQA</a> ). Member of categories of projects that are considered to normally have a neutral or negligible effect on the environment and do not need full environmental documentation.  |
| CEQA                                  | <a href="#">California Environmental Quality Act</a> – the State legislation requiring Negative Declarations or Environmental Impact Reports (EIRs)  |
| CFR                                   | <a href="#">Code of Federal Regulations</a> . Key sections of interest for transportation and air quality include Titles <a href="#">23 (Highways)</a> , <a href="#">49 (Transit)</a> , and <a href="#">40 (Environmental Protection)</a> .  |
| CMAQ                                  | In a transportation funding context, the Congestion Mitigation and Air Quality program. Projects meet CMAQ requirements if they reduce spot congestion problems or improve air quality (reduce emissions) without increasing road capacity, in <a href="#">CO</a> and/or <a href="#">Ozone nonattainment</a> and <a href="#">maintenance</a> areas. CMAQ projects must meet emission reduction cost-effectiveness criteria using standardized analysis methods, and <a href="#">PM</a> emission reduction projects can be funded once an area qualifies based on <a href="#">CO</a> and/or <a href="#">ozone</a> . See the Caltrans “Official CMAQ Web Page”: ( <a href="http://www.dot.ca.gov/hq/transprog/federal/cmaq/Official_CMAQ_Web_Page.htm">http://www.dot.ca.gov/hq/transprog/federal/cmaq/Official_CMAQ_Web_Page.htm</a> ) for more information. CMAQ projects are approved and programmed by <a href="#">MPOs</a> and <a href="#">RTPAs</a> as part of their <a href="#">TIP</a> processes. CMAQ projects are sometimes, but not necessarily, Transportation Control Measures ( <a href="#">TCMs</a> ). Note: <a href="#">MAP-21</a> made a number of changes to the CMAQ program, including adding specific requirements for <a href="#">PM2.5</a> -related projects; consult the <a href="#">Caltrans CMAQ page</a> above or the <a href="#">FHWA CMAQ web site</a> ( <a href="http://www.fhwa.dot.gov/environment/air_quality/cmaq/">http://www.fhwa.dot.gov/environment/air_quality/cmaq/</a> ). |
| CO<br>( <a href="#">CO Protocol</a> ) | <a href="#">Carbon Monoxide</a> (CO) is the traditional transportation-related pollutant. It is primarily produced by motor vehicles, and is a localized, “hot spot” type of health issue. Due to improved vehicle emission controls, CO is seldom a major problem with current projects. The standard analysis technique in California is the <a href="#">Caltrans/UCD CO Protocol</a> screening method.  |
| CO2                                   | <a href="#">Carbon dioxide</a> . A major human-influenced greenhouse gas.  |
| Conformity                            | The process set up under the Federal Clean Air Act Section 176(c) ( <a href="#">42 USC 7506(c)</a> ) to ensure that Federal actions are consistent with the Clean Air Act and State Implementation Plans ( <a href="#">SIPs</a> ) prepared to implement it. The process is governed by <a href="#">U.S. EPA</a> regulations, primarily at <a href="#">40 CFR 93</a> Subparts <a href="#">A (Transportation Conformity)</a> and <a href="#">B (General Conformity)</a> . Transportation Conformity pertains to highway and transit planning and project actions under <a href="#">FHWA</a> and <a href="#">FTA</a> jurisdiction, and covers most of Caltrans’ work and <a href="#">MPO</a> regional transportation planning.  |

---

*This list describes the general meaning of various terms and acronyms used in the air quality analysis and transportation conformity processes. The definitions have no official standing as Department policy, and are provided for general information only.*

## Caltrans Air Quality and Conformity Glossary

---

|                          |  |
|--------------------------|--|
| Design Concept and Scope | <p>These are the key elements (in addition to a schedule and of course a budget) needed for a project description in a <a href="#">RTP</a>, <a href="#">TIP</a>, and regional or statewide <a href="#">conformity</a> determination. From <a href="#">40 CFR 93.101</a>:</p> <p>“<i>Design concept</i> means the type of facility identified by the project, e.g., freeway, expressway, arterial highway, grade-separated highway, reserved right-of-way rail transit, mixed-traffic rail transit, exclusive busway, etc.”</p> <p>“<i>Design scope</i> means the design aspects which will affect the proposed facility's impact on regional emissions, usually as they relate to vehicle or person carrying capacity and control, e.g., number of lanes or tracks to be constructed or added, length of project, signalization, access control including approximate number and location of interchanges, preferential treatment for high-occupancy vehicles, etc.”</p> |
| Donut Area               | <p>This is a non-<a href="#">MPO</a> area that is in a nonattainment area which also contains an <a href="#">MPO</a>. The non-<a href="#">MPO</a> area must have a <a href="#">conformity</a> determination on its <a href="#">TIP</a> done by an adjacent <a href="#">MPO</a> in the nonattainment area, and approved by <a href="#">FHWA</a>. As of 2013, the only "donut" areas in California are certain tribal areas that have separate ozone designations from the surrounding South Coast area.</p>   |
| EAC                      | <p>Early Action Compact. A special process for areas that are attainment for a <a href="#">NAAQS</a> but may need additional SIP-related control measures to prevent nonattainment designation. California has none of these.</p>  |
| EIS                      | <p>Environmental Impact Statement. This document is prepared for <a href="#">NEPA</a> purposes when there are or may be significant environmental impacts that require mitigation, minimization, or avoidance measures. Normally done only for projects; planning and programming are exempt from <a href="#">NEPA</a> requirements.</p>   |
| EMFAC                    | <p>California On-Road Mobile Source Emission Inventory Model (generates <a href="#">EMission FACTors</a> hence the common name <a href="#">EMFAC</a>). Used in California for road-related air quality analyses including <a href="#">conformity</a> analysis. Designed and maintained by <a href="#">ARB</a>.</p>   |
| EPA                      | <p><a href="#">U.S. (Federal) Environmental Protection Agency</a>. <a href="http://www.epa.gov">http://www.epa.gov</a></p>   |
| FAA                      | <p><a href="#">Federal Aviation Administration</a> – part of the U.S. <a href="#">Department of Transportation</a>. Regulates aircraft and aviation safety, airport projects, and provides air traffic control. Must be consulted for surface transportation projects that may affect airport operations or will make changes on the groundside of airports. FAA projects are normally covered by <a href="#">General Conformity</a>. <a href="http://www.faa.gov/">http://www.faa.gov/</a></p>  |
| Federal funds recipients | <p>For transportation <a href="#">conformity</a> purposes, Federal funds recipients are agencies and entities that routinely receive funding from Federal <a href="#">Title 23</a> (highways) and <a href="#">Title 49</a> (transit) programs. Transportation <a href="#">conformity</a> prevents approval of <a href="#">regionally significant</a> transportation project by such an entity during a <a href="#">conformity lapse</a>.</p>   |

---

*This list describes the general meaning of various terms and acronyms used in the air quality analysis and transportation conformity processes. The definitions have no official standing as Department policy, and are provided for general information only.*

## Caltrans Air Quality and Conformity Glossary

---

|                      |  |
|----------------------|--|
| FHWA                 | <a href="#">Federal Highway Administration</a> – part of U.S. <a href="#">Department of Transportation</a> . Primarily deals with highway-related programs. <a href="http://www.fhwa.dot.gov">http://www.fhwa.dot.gov</a>  |
| Financial Constraint | <a href="#">RTPs</a> and <a href="#">TIPs</a> must be financially constrained – must only contain projects that can be delivered with “reasonably available” funding (for the <a href="#">RTP</a> ) or committed funding (for the <a href="#">TIP</a> ). The regional project list cannot be a wish list; it has to have some basis in financial reality.  |
| FIP                  | Federal Implementation Plan. If a <a href="#">SIP</a> is inadequate or not submitted, <a href="#">EPA</a> is required (usually after 24 months) to issue a Federal Implementation Plan covering the failure issue(s). In many but not all cases, the <a href="#">Clean Air Act</a> highway sanction will apply at the same time.   |
| FONSI                | Finding of No Significant Impact. This is the final <a href="#">NEPA</a> document prepared when there are no remaining significant adverse environmental impacts due a project, after applying any necessary mitigation, minimization, and avoidance measure. Similar to a <a href="#">CEQA</a> Negative Declaration (ND).   |
| FR                   | <a href="#">Federal Register</a> . References to specific items are made by citing the volume and page numbers as “[volume] FR [starting page]”. For instance, the 1997 <a href="#">conformity</a> rule amendments final rule is found at <a href="#">62 FR 43780</a> .  |
| FRA                  | <a href="#">Federal Railroad Administration</a> – part of the U.S. <a href="#">Department of Transportation</a> . Focuses mainly on freight railroading not transit operations, but has some regulatory responsibility for commuter, high speed rail, and similar passenger rail activities. FRA projects are normally covered by <a href="#">General Conformity</a> , unless they are part of a <a href="#">FHWA</a> or <a href="#">FTA</a> -sponsored project. <a href="http://www.fra.dot.gov/">http://www.fra.dot.gov/</a>   |
| Freeze (Conformity)  | If a “control strategy” <a href="#">SIP</a> is disapproved without a “protective finding” then the nonattainment area enters a Conformity Freeze. During a Freeze, no new regional <a href="#">conformity</a> determinations can be made, so the ability to amend the <a href="#">RTP</a> and <a href="#">TIP</a> is very limited, and if a mandatory <a href="#">RTP</a> or <a href="#">TIP conformity</a> deadline comes up during a Freeze the deadline cannot be met and a <a href="#">Lapse</a> starts. However, during a Freeze, projects in the first 4 years of the currently conforming <a href="#">RTP</a> and <a href="#">TIP</a> can continue to advance and be approved. See also <a href="#">Lockdown</a> , which is functionally similar to a Freeze but is caused by lack of information needed to make a regional <a href="#">conformity</a> determination and is established by <a href="#">FHWA</a> rather than <a href="#">EPA</a> . |
| FSTIP                | Federally-approved Statewide Transportation Improvement Program. The FSTIP is the combination of all <a href="#">MPOs’ FTIPs</a> , and the program of projects in non-MPO areas, for a 4-year period, that is approved by <a href="#">FHWA</a> and <a href="#">FTA</a> . Not to be confused with the <a href="#">STIP</a> . Due to state law, in California a new FSTIP is done every 2 years.   |

---

*This list describes the general meaning of various terms and acronyms used in the air quality analysis and transportation conformity processes. The definitions have no official standing as Department policy, and are provided for general information only.*

## Caltrans Air Quality and Conformity Glossary

---

|                       |  |
|-----------------------|--|
| FTA                   | <a href="#">Federal Transit Administration</a> – part of U.S. <a href="#">Department of Transportation</a> . Primarily deals with public transit funding and programs. <a href="http://www.fta.dot.gov">http://www.fta.dot.gov</a>   |
| FTIP                  | The Regional Federal Transportation Improvement Program document that includes all Federal projects in the <a href="#">MPO</a> , and that serves as the basis for the <a href="#">TIP conformity</a> determination.  |
| General Conformity    | This is the <a href="#">conformity</a> process defined in <a href="#">40 CFR 93 Subpart B</a> , which applies to federally funded or approved projects that do not fall under Transportation Conformity ( <a href="#">40 CFR 93 Subpart A</a> ) requirements. For instance, Corps of Engineers permits, and <a href="#">FRA</a> and <a href="#">FAA</a> projects, that do not involve <a href="#">FHWA</a> or <a href="#">FTA</a> action or funds, require a General Conformity determination. If Transportation Conformity applies, General Conformity does not (see <a href="#">40 CFR 93.153(a)</a> ), although some aspects of it might need to be covered in a project’s <a href="#">NEPA</a> document to address practice differences where a non- <a href="#">FHWA/FTA</a> agency action is also needed.  |
| Greenhouse Gas (GHGs) | <a href="#">Greenhouse Gases</a> are gases and other materials that absorb infrared radiation, which retains heat in the atmosphere. They operate similarly to glass in a greenhouse – allow sunlight in, but retard re-radiation of infrared light and heat. <a href="#">Carbon Dioxide (CO<sub>2</sub>)</a> is a strong and long-lived greenhouse gas, and is emitted from many natural and man-made processes; it is implicated in human-influenced global warming and related climate change. Many other gases also have a greenhouse effect in the atmosphere, including methane, water vapor, ozone, and even some types of particulate matter. Greenhouse gas emissions are regulated, and responses to their effects required, under State law (AB 32 and related laws). Greenhouse gases are considered “criteria pollutants” by the U.S. <a href="#">EPA</a> , but do not have concentration-based standards as most other criteria pollutants do. <a href="#">Conformity</a> procedures do not apply for greenhouse gases, and they are normally analyzed separately in project-level environmental studies and planning documents from air quality and <a href="#">conformity</a> studies. |
| HC                    | Hydrocarbons, generally. Includes such things as VOC (volatile organic compounds), <a href="#">ROG</a> (reactive organic gases), and many air toxics (like benzene, acetaldehyde, etc.)  |
| Hotspot Analysis      | Analysis performed for <a href="#">CO</a> , <a href="#">PM<sub>2.5</sub></a> , and/or <a href="#">PM<sub>10</sub></a> to demonstrate that a project will not cause or contribute to, or worsen, localized violation of <a href="#">NAAQS</a> or, for <a href="#">CEQA</a> purposes, <a href="#">CAAQS</a> . Required for a project-level conformity determination in nonattainment or maintenance areas for <a href="#">CO</a> , <a href="#">PM<sub>2.5</sub></a> , and <a href="#">PM<sub>10</sub></a> . Analysis tools are described at the Caltrans web sites for <a href="#">CO tools</a> and <a href="#">PM tools</a> .   |
| HOV                   | High Occupancy Vehicle. Generally defined as one with 2 or more occupants.   |
| I/M                   | Inspection and Maintenance. The Smog Check program.  |

---

*This list describes the general meaning of various terms and acronyms used in the air quality analysis and transportation conformity processes. The definitions have no official standing as Department policy, and are provided for general information only.*

## Caltrans Air Quality and Conformity Glossary

---

|  |   |
|--|---|
| Interim <a href="#">RTP</a> or <a href="#">TIP</a> | This is a standard <a href="#">RTP</a> or <a href="#">TIP</a> document that includes only projects that are <a href="#">exempt</a> from conformity requirements, or are <a href="#">Transportation Control Measures</a> listed for emission credit in the approved <a href="#">SIP</a> . The Interim <a href="#">TIP</a> and <a href="#">RTP</a> are needed to proceed with exempt and <a href="#">TCM</a> projects during a <a href="#">conformity lapse</a> .   |
| Lapse (Conformity)                                 | The situation that exists when there is not a conforming <a href="#">RTP</a> and/or <a href="#">TIP</a> in an <a href="#">MPO</a> area where conformity applies. Occurs when a required regional <a href="#">conformity</a> determination is not made, or certain other triggering events occur. During a Lapse, no <a href="#">regionally-significant</a> highway or transit project approvals are possible regardless of project funding, unless the project is a formal <a href="#">TCM</a> . For a conformity lapse based on failure to adopt a new RTP or TIP conformity determination on time, the full effect does not apply during a one year grace period; during the grace period, the area is effectively in a <a href="#">Lockdown</a> .  |
| Lockdown (Conformity)                              | This is an informal restriction on conformity determinations based on lack of information needed to make a conformity determination, such as when an emission model changes and an area cannot demonstrate conformity until new emission budgets based on the new emission model become available. A lockdown is normally established based on a <a href="#">FHWA</a> letter to the nonattainment area <a href="#">MPO(s)</a> affected. During a lockdown, no new regional conformity determinations can be approved, but projects in the conforming <a href="#">RTP</a> and <a href="#">TIP</a> at the time the lockdown starts may continue to be advanced and approved. See also <a href="#">Freeze</a> which is functionally similar but is caused by a <a href="#">SIP</a> failure.  |
| LRP  | Long Range Plan. In a transportation planning and conformity context, usually refers to the <a href="#">RTP</a> or <a href="#">MTP</a> .  |
| Maintenance SIP                                    | <p>A type of <a href="#">SIP</a> that supports redesignation by <a href="#">U.S. EPA</a> of an area from <a href="#">nonattainment</a> to <a href="#">attainment</a>. An area must be found to have attained the standard (based on monitoring results), then prepares a <a href="#">SIP</a> demonstrating that the area will continue to attain the standard. After approval of the Maintenance SIP, <a href="#">EPA</a> redesignates the area to <a href="#">Attainment</a>. Conformity continues to apply until the end of the “Maintenance Period” – 20 years after the initial redesignation date.</p> <p>A “Limited Maintenance <a href="#">SIP</a>” is a type of Maintenance SIP that is used when a full set of emission budgets for maintenance isn’t needed. There are no Limited Maintenance <a href="#">SIPs</a> in California as of 2013, but the Nevada portion of Lake Tahoe has one for <a href="#">CO</a>. Conformity still applies in these areas, but the regional analysis process is simpler because there are no specific emission budgets (<a href="#">MVEBs</a>).</p> |
| MAP-21   | Federal transportation program authorization law passed by Congress in 2011. See the <a href="#">FHWA MAP-21 web site</a> ( <a href="http://www.fhwa.dot.gov/map21/">http://www.fhwa.dot.gov/map21/</a> ).  |
| Minor  | Minor Program – similar to the <a href="#">SHOPP</a> , but for smaller projects.  |

---

*This list describes the general meaning of various terms and acronyms used in the air quality analysis and transportation conformity processes. The definitions have no official standing as Department policy, and are provided for general information only.*

## Caltrans Air Quality and Conformity Glossary

---

|  |   |
|--|---|
| MOVES                                    | Motor Vehicle Emission Simulator. U.S. EPA's mobile source emission model. <a href="#">EMFAC</a> is used in California; MOVES elsewhere in the U.S.   |
| MPO                                      | <p>Metropolitan Planning Organization. Regional transportation planning organization set up under Federal law to plan and program for use of Federal funds in an area with more than 50,000 population in an urbanized area. MPOs control transportation funding and conformity analysis for their regions. MPO boundaries sometimes match <a href="#">nonattainment areas</a> or counties, but don't have to. California also has <a href="#">RTPAs</a> designated under state law; <a href="#">RTPAs</a> may also be MPOs, but don't have to be, and <a href="#">RTPAs</a> also exist for rural counties that do not qualify based on population and urbanized areas to be an MPO.</p> <p>For more California MPO contact information see: <a href="#">Caltrans DOTP-ORIP web site</a> or <a href="#">CAPCOA</a>.</p>   |
| MSAT<br>(Mobile<br>Source Air<br>Toxics) | <p>Air Toxics, Toxic Air Contaminants, and Mobile Source Air Toxics (MSAT). These are compounds regulated under the "air toxics" provisions of the California and Federal Clean Air Acts. In general, they have either acute (short-term, such as irritation or poisoning) or long-term (typically cancer-related) adverse health effects. Air toxics do not have any identified concentration below which there is no clear effect on human health – the effective allowable concentration is zero. However, the effects may vary according to concentration and exposure time, so "health risk" can be evaluated. Some criteria pollutants (which usually have a concentration standard below which human health should not be affected) are also air toxics; examples include <a href="#">lead</a> and (<a href="#">CAAQS</a> only) vinyl chloride. Asbestos is also regulated as an air toxic.</p> <p>Mobile Source Air Toxics (MSAT) are a subset of the overall air toxics category. They are emitted primarily from on- and off-road motor vehicles. <a href="#">EPA</a> identified about 20 air toxics as MSAT in a 2007 rule. See <a href="#">FHWA Air Toxics web page</a> (<a href="http://www.fhwa.dot.gov/environment/air_quality/air_toxics/">http://www.fhwa.dot.gov/environment/air_quality/air_toxics/</a>) for more information.</p> |
| MVEB                                     | Motor Vehicle Emission Budget. When a <a href="#">SIP</a> is prepared to demonstrate attainment, or reasonable progress toward attainment, of a <a href="#">NAAQS</a> , regional airshed modeling is done to determine what amount of emissions (direct or of precursors) can be accepted while still meeting the standard. The on-road motor vehicle portion of that amount is determined, and is published as the Motor Vehicle Emission Budget (MVEB) for specific analysis years. Successful Regional Conformity analysis must show that the emissions from the transportation system, including all proposed projects, will not exceed the MVEB for each analysis year.  |

---

*This list describes the general meaning of various terms and acronyms used in the air quality analysis and transportation conformity processes. The definitions have no official standing as Department policy, and are provided for general information only.*

## Caltrans Air Quality and Conformity Glossary

---

|                    |   |
|--------------------|---|
| NAAQS              | National Ambient Air Quality Standards. These are the Federal “criteria pollutant” standards that are set to protect public health with a margin of safety. Failure to attain NAAQS for carbon monoxide ( <a href="#">CO</a> ), <a href="#">ozone</a> , <a href="#">PM2.5</a> , <a href="#">PM10</a> , and <a href="#">NO2</a> trigger transportation conformity requirements.  |
| NEPA               | National Environmental Policy Act – the Federal legislation requiring environmental review of Federal actions – results in Finding of No Significant Impact ( <a href="#">FONSI</a> ) or Environmental Impact Statement ( <a href="#">EIS</a> )   |
| NEPA Assignment    | Assignment of <a href="#">NEPA</a> responsibilities to the State by <a href="#">FHWA</a> under terms of 23 U.S.C. 326 (full assignment for certain common <a href="#">CEs</a> , including project-level conformity determination) or 327 (assigns <a href="#">NEPA</a> only, not conformity determination). Caltrans has received <a href="#">NEPA</a> assignment under both sections. For more information, consult the <a href="#">SER Chapter 38</a> or the <a href="#">Division of Environmental Analysis NEPA Assignment web site</a> .  |
| NH3                | <a href="#">Ammonia</a> . A growing issue, particularly as a precursor for <a href="#">particulate matter</a> .   |
| NO <sub>2</sub>    | <a href="#">Nitrogen dioxide</a> (NO <sub>2</sub> ). One of the nitrogen oxides which participate in ozone formation on a regional scale. It can also be a localized issue based on certain acute irritant effects. <a href="#">EPA</a> finalization in 2010 of a 1-hour NO <sub>2</sub> <a href="#">NAAQS</a> and a new near-road monitoring program required by that action are likely to result in new nonattainment areas (all NO <sub>2</sub> areas as of 2013 are <a href="#">Maintenance</a> or Unclassifiable/Attainment) and hot spot analysis requirements after 2017 or 2018. NO <sub>2</sub> is also a precursor for secondary particulate matter (especially <a href="#">PM2.5</a> and smaller) formation.   |
| Nonattainment Area | Air basin, county, or other area identified in <a href="#">40 CFR 81.305</a> (for California) and the <a href="#">U.S. EPA “Green Book”</a> as violating some Federal air quality standard ( <a href="#">NAAQS</a> ), or by <a href="#">ARB</a> as violating some California air quality standard ( <a href="#">CAAQS</a> ). <a href="#">Conformity</a> only applies in Federal nonattainment and <a href="#">maintenance</a> areas.  |
| NOx                | <a href="#">Nitrogen Oxides</a> (NOx). This is a group of compounds that is a primary precursor emission for low-altitude ozone formation. It is typically considered to be the sum of NO + <a href="#">NO2</a> . N <sub>2</sub> O (nitrous oxide, a greenhouse gas) is normally excluded from the definition of NOx. NOx is mainly formed in high-temperature conditions with air (which is mostly nitrogen – N <sub>2</sub> ), such as in internal combustion engines. Diesel engines are especially large and difficult-to-control producers of NOx due to high combustion temperatures, excess air (beyond what is needed for complete combustion), and low temperature/low hydrocarbon exhaust (which limits use of conventional automotive catalytic converters). NOx is also a precursor for secondary particulate matter (especially <a href="#">PM2.5</a> ) formation and can produce acid rain. |

---

*This list describes the general meaning of various terms and acronyms used in the air quality analysis and transportation conformity processes. The definitions have no official standing as Department policy, and are provided for general information only.*

## Caltrans Air Quality and Conformity Glossary

---

|              |   |
|--------------|---|
| Ozone        | <p><a href="#">Ozone</a> is a form of oxygen (O<sub>3</sub>) that is an irritant and with chronic exposure causes various respiratory diseases and damages plants. It is formed in the atmosphere as a pollutant by photochemical reactions between, primarily, reactive organic gases (<a href="#">ROG</a>) and nitrogen oxides (<a href="#">NOx</a>). Ozone is one of the primary components of “smog” and is usually measured over averaging times of 1 hour (<a href="#">CAAQS</a> only) and 8 hours (<a href="#">CAAQS</a> and <a href="#">NAAQS</a>). Because ozone takes some time (usually several hours) to develop, it is not a hot-spot pollutant. The photochemical reaction is more rapid and effective at higher temperatures and with more sunlight, so ozone is primarily a summer issue.</p> |
| Pb           | <p><a href="#">Lead</a>. This is a criteria pollutant but for transportation purposes (since unleaded gas became universal) has mainly been an issue with construction in contaminated soils or with lead paint. Not a transportation conformity-related pollutant.</p>   |
| PIP          | <p>Public Involvement Plan. Usually defined by <a href="#">MPOs</a> for management of the <a href="#">RTP</a> development process.</p>  |
| PM           | <p>Particulate Matter. Shorthand used to refer to BOTH <a href="#">PM10</a> and <a href="#">PM2.5</a>.</p>  |
| PM2.5        | <p><a href="#">Particulate Matter with an aerodynamic diameter of 2.5 micrometers or less</a>. Sometimes called “fine particulate matter.” Most diesel and other motor vehicle exhaust particulate matter is PM2.5 or smaller.</p>  |
| PM10         | <p><a href="#">Particulate Matter with an aerodynamic diameter of 10 micrometers or less</a> (PM10). Sometimes called “respirable particulate matter” because it goes deep into the lungs. (PM10-PM2.5) is called the “coarse fraction” of particulate matter. PM10 mass (though not particle number) is usually dominated by geological material (wind-blown dust) and re-entrained dust from roadways.</p>  |
| PS&E         | <p>Plans, Specification, and Estimates. This is the completion point of the Design phase of a highway project. It is where the project agreement or other Federal approval for construction funding is requested. Once all necessary approvals are received, usually triggered by filing an “E76” form or its equivalent, the project is “Ready to List” (RTL) for a construction contract.</p>   |
| POAQC, PLAQC | <p>Project of Air Quality Concern or Project of Local Air Quality Concern for particulate matter hot spot analysis purposes. A POAQC must have a detailed hot spot analysis for <a href="#">PM10</a> and/or <a href="#">PM2.5</a> depending on what the area is nonattainment or maintenance for. PLAQC is the term used in the <a href="#">EPA PM</a> guidance; POAQC is the conventional term used in California.</p>   |

---

*This list describes the general meaning of various terms and acronyms used in the air quality analysis and transportation conformity processes. The definitions have no official standing as Department policy, and are provided for general information only.*

## Caltrans Air Quality and Conformity Glossary

---

**RACM** Reasonably Available Control Measure(s). These are emission control measures that must be researched and, as feasible and effective, implemented in [ozone SIPs](#) for all nonattainment areas. Mobile Source RACM commitments in an approved [SIP](#), even if voluntary, must be tracked and implemented as [TCMs](#) in the [Conformity](#) process. See also [BACM](#) for [PM10](#) and [PM2.5 SIPs](#).

---

**Regionally Significant Project** From [40 CFR 93.101](#):  
“*Regionally significant project* means a transportation project (other than an exempt project) that is on a facility which serves regional transportation needs (such as access to and from the area outside of the region, major activity centers in the region, major planned developments such as new retail malls, sports complexes, etc., or transportation terminals as well as most terminals themselves) and would normally be included in the modeling of a metropolitan area's transportation network, including at a minimum all principal arterial highways and all fixed guideway transit facilities that offer an alternative to regional highway travel.”  
Most state highways are regionally significant facilities under this definition.

---

**RFP/ROP [SIP](#)** Reasonable (or Rate of) Further Progress, or Rate of Progress [SIP](#). This form of [SIP](#) is required for most [nonattainment](#) areas, in addition to an [Attainment SIP](#), to show that at least a minimum amount of emission reduction, resulting in reasonable progress toward attainment, happens each year. This is required to be in place before the Attainment [SIP](#), and in cases where [PM10](#) standards (for instance) have not been met even with an Attainment [SIP](#) the RFP or ROP [SIP](#) is the only thing left because the attainment requirement becomes “as expeditiously as practicable.”

---

**ROD** Record of Decision. This is published in the Federal Register and is the formal completion document for the [NEPA](#) process when an [EIS](#) is used. The ROD formally commits to implementation of any mitigation, minimization, and avoidance measures for impact identified in the Final [EIS](#). [FHWA](#), [FTA](#), or [Caltrans](#) (per [NEPA Assignment](#)) cannot sign a ROD if [conformity](#) applies until [FHWA](#) or [FTA](#) makes a project-level [conformity](#) determination.

---

**ROG** [Reactive Organic Gases](#) (ROG). This is a large group of hydrocarbons that are photochemically reactive in the atmosphere. Generally (though not precisely) synonymous with [Volatile Organic Compounds](#) (VOC) and [Non-Methane Organic Gases](#) (NMOG). Along with [NOx](#), these are the primary precursor chemicals that produce low-altitude [ozone](#) through photochemical reactions.

---

*This list describes the general meaning of various terms and acronyms used in the air quality analysis and transportation conformity processes. The definitions have no official standing as Department policy, and are provided for general information only.*

## Caltrans Air Quality and Conformity Glossary

---

|                 |  |
|-----------------|--|
| RTP             | Regional Transportation Plan – a 20-year (minimum) plan of transportation system improvements and activities in a region. Prepared by an <a href="#">MPO</a> and approved (with a <a href="#">conformity</a> determination if applicable) by <a href="#">FHWA</a> and <a href="#">FTA</a> . RTPs are also prepared by non-MPO <a href="#">RTPAs</a> under State law; <a href="#">conformity</a> determinations are not required for these documents because there is no federal approval process. The RTP is subject to <a href="#">CEQA</a> requirements for both <a href="#">MPOs</a> and <a href="#">RTPAs</a> , but not <a href="#">NEPA</a> . |
| RTPA            | Regional Transportation Planning Agency. These are <a href="#">MPO</a> -like bodies that exist in all counties (sometimes portions or combinations of counties) under California transportation planning law. They perform many of the planning functions of an <a href="#">MPO</a> , and in some cases are also the <a href="#">MPO</a> . Their decisions and plans are not subject to <a href="#">conformity</a> requirements unless they also are the <a href="#">MPO</a> in a <a href="#">nonattainment area</a> for a <a href="#">NAAQS</a> . The RTPA's <a href="#">RTP</a> , however, is subject to <a href="#">CEQA</a> .                  |
| SAFETEA-LU      | Federal transportation program authorization law passed by Congress in August 2006. Replaced in 2011 by <a href="#">MAP-21</a> .   |
| SER             | <a href="#">Standard Environmental Reference</a> . This web site is Caltrans' environmental analysis manual, covering studies for and preparation of environmental documents under <a href="#">CEQA</a> and <a href="#">NEPA</a> . Project-level conformity procedures and documentation are also described in the SER. See: <a href="http://www.dot.ca.gov/ser/">http://www.dot.ca.gov/ser/</a> .   |
| SHOPP           | State Highway Operation and Preservation Program – the funding program that covers most rehabilitation and minor operational improvements to the State Highway system.   |
| SIP             | State Implementation Plan. Federally enforceable plan developed by the State and air districts to implement the Federal Clean Air Act. Includes attainment and maintenance SIPs for areas that violate or formerly violated current <a href="#">NAAQS</a> . Air district and <a href="#">ARB</a> regulations needed to implement SIP commitments are also incorporated into the SIP, and once there are independently enforceable under both State and Federal law. See <a href="#">ARB</a> and <a href="#">EPA Region 9</a> California SIP web pages.   |
| SO <sub>2</sub> | <a href="#">Sulfur Dioxide</a> . One of the sulfur oxides ( <a href="#">SOx</a> ), Regulated as a specific pollutant due to acute hazard issues. As with <a href="#">SOx</a> , primarily an industrial issue; not a transportation conformity issue in California.   |
| SO <sub>x</sub> | <a href="#">Sulfur Oxide</a> . Not individually regulated (see <a href="#">SO2</a> for the individually regulated sulfur oxide), but as a category contributes to acid rain and can be a precursor of <a href="#">particulate matter</a> . Mostly an industrial emission issue, but might be an issue if large numbers of diesel vehicles or engines are in use in a small area, using higher-sulfur fuel than is allowed for on-road purposes..   |

---

*This list describes the general meaning of various terms and acronyms used in the air quality analysis and transportation conformity processes. The definitions have no official standing as Department policy, and are provided for general information only.*

## Caltrans Air Quality and Conformity Glossary

---

**SOV** Single Occupant Vehicle. The predominant mode of commuting in most areas, but the least energy efficient and the greatest contributor to mobile source air pollution in most areas.

---

**Statewide Transportation Plan** A 20-year (minimum) plan of transportation system improvements and activities, or policies, for an entire state. If projects are identified, it is essentially similar to a [RTP](#) but prepared for a state rather than a specific region. The state must carry out a [conformity](#) analysis and obtain a [conformity](#) determination for this type of statewide transportation plan. The Statewide Transportation Plan can also be a policy plan which does not identify specific project locations, [design concepts](#), [scopes](#), and schedules; in this case, a [conformity](#) determination is not required. The current California Transportation Plan is a policy plan; see: <http://www.dot.ca.gov/hq/tpp/offices/osp/ctp.html>

---

**STIP** State Transportation Improvement Program: IN CALIFORNIA, the biennial program of major transportation projects approved by the California Transportation Commission. This is a State-only document in California, and does not include projects that come from lump-sum programs like the [SHOPP](#) or [Minor Program](#) (which are approved separately). For the Federally-approved Statewide Transportation Improvement Program see [FSTIP](#).

---

**TCM** Transportation Control Measure. These are measures that reduce mobile source emissions through changes to the transportation system and travel demand, rather than through emission reductions from vehicles and other equipment. TCMs contained in an approved [SIP](#) must be implemented on schedule and “timely implementation” must be documented whenever a [Conformity](#) Determination is done.

---

**TIP (or [FTIP](#))** Regional Transportation Improvement Program submitted for federal approval. In conformity areas, this is specific program of up to 4 years of projects with identified funding, prepared by the [MPO](#), and incorporated into the “[FSTIP](#)” by the State for Federal approval. The [FTIP](#) and [FSTIP](#) include all [regionally significant](#) and other projects intended for Federal funding, or required for conformity analysis, during the programming period. In California, the [FTIP](#) and [FSTIP](#) are updated biennially under State law.

---

Other useful air quality and Clean Air Act conformity glossaries include:

- Federal Highway Administration: in [Transportation Conformity Reference Guide](#)
- U.S. EPA: in [General Conformity Training Module](#)
- California Air Resources Board: in [Glossary of Air Pollution Terms](#)
- U.S. EPA: in [Glossary of Climate Change Terms](#)

*This list describes the general meaning of various terms and acronyms used in the air quality analysis and transportation conformity processes. The definitions have no official standing as Department policy, and are provided for general information only.*