

## Transportation Glossary

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| <b>3C Planning</b>                          | Comprehensive, cooperative and continuous transportation planning process.  |
| <b>Access Management</b>                    | Process to provide access to land while simultaneously preserving the flow of traffic on surrounding road system in terms of safety, capacity and speed. Implemented through the issuance of driveway permits and other strategies.   |
| <b>Aggregate Demand Model</b>               | A model obtained by combining travel observations for individuals into geographic zones.  |
| <b>Air Quality Conformity Determination</b> | Demonstration that the emissions from travel on the transportation system are consistent with goals for air quality found in the State Implementation Plan (SIP).   |
| <b>Analysis Area</b>                        | Any geographic area such as a zone or group of zones combined for the purpose of making an analysis.  |
| <b>Annual Average Daily Traffic</b>         | The daily traffic numbers seasonally adjusted to compensate for the changing amounts of traffic at different times of the year.   |
| <b>Attainment Area</b>                      | An area with air quality that meets or exceeds the US Environmental Protection Agency (EPA) health standards as stated in the Clean Air Act. Non-attainment areas are areas considered not to have met these standards for designated pollutants. An area may be classified as an “attainment area” for one pollutant and a “non-attainment area” for other pollutants. |
| <b>Attraction</b>                           | The pull of attracting power of a zone, normally measured as a fraction of employment activity. For non-home based trips, attractions in a zone can be considered synonymous with trip destinations in that zone.   |
| <b>Authorization</b>                        | The level of funding designated by Congress for specific legislation.   |
| <b>Auto Occupancy</b>                       | The average number of people in a vehicle for a particular trip purpose. Used to convert person trips to vehicle trips.   |
| <b>Average Daily Traffic (ADT)</b>          | The average number of vehicles passing a specified point during a 24-hour period of time.   |
| <b>Base Fleet</b>                           | The average number of transit revenue vehicles in scheduled operation during the non-peak hours of the average weekday operation.   |
| <b>Base Volume</b>                          | The traffic existing on the network in the base year.   |
| <b>Bicycle Lane</b>                         | Pavement marking that apportions a segment of the roadway specifically for bicycle traffic where motorized vehicles are prohibited. Bicycle lanes are 5-6 feet wide and are typically installed along the right side of the roadway or to the left of a row of on-street auto parking.  |
| <b>Bottleneck</b>                           | The point of minimum highway capacity along a highway segment, often where traffic delays are experienced/expected.   |
| <b>Bus Trip</b>                             | Defined as a one-way trip by a bus while in revenue service, starting at one point along a route and ending at another point on that route. A round trip is counted as two (2) separate bus trips.  |
| <b>Capacity</b>                             | The maximum number of vehicles that a lane or section of roadway can handle during a given time period under prevailing roadway and traffic conditions.   |
| <b>Carbon Monoxide (CO)</b>                 | A colorless, odorless, tasteless gas formed as a result of incomplete fuel combustion. Human activities (i.e., transportation uses, industrial processes, lawn mowing, etc.) are the largest sources of CO production.  |
| <b>Carpool</b>                              | An arrangement in which two (2) or more occupants, including the driver, share the use and/or cost of traveling/commuting between at least two (2) fixed points on a regular basis.   |
| <b>Central Business District (CBD)</b>      | An area of intense commercial development in the center of a city.  |
| <b>Charette</b>                             | A meeting to resolve a problem or issue. Within a specified time frame, participants work together to reach a resolution.   |

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| <b>Code of Federal Regulations (CFR)</b>                    | The set of the general and permanent rules published in the Federal Register by the Executive departments and agencies of the federal government. The Code is divided into 50 titles that represent areas subject to federal regulation.  |
| <b>Collector Street</b>                                     | The roadways servicing traffic between thoroughfares and local roadways. These roadways are mainly used for traffic movements within residential, commercial, and industrial areas.   |
| <b>Community Impact Assessment (CIA)</b>                    | Process to evaluate the effects of a transportation plan or project on a community and its quality of life.   |
| <b>Commuter Rail</b>  | The portion of main-line railroad transportation operations which encompass passenger train service for local, short-distance travel between a central business district and nearby suburbs.  |
| <b>Complete Streets</b>                                     | Roads designed and operated to enable safe, attractive, and comfortable access and travel for all users, including pedestrians, bicyclists, transit users, and motorists.   |
| <b>Comprehensive Plan</b>                                   | A planning process that requires the inclusion and careful consideration of the impacts, one upon the other, of land use, transportation, water/sewer, recreation, health, and other concerns. Usually published as the guide or blueprint for future policy decisions.   |
| <b>Comprehensive Transportation Plan (CTP)</b>              | A plan required by NCDOT designed to serve as an official guide to providing a well-coordinated, efficient, and economical transportation system utilizing all modes of transportation. The CTP supersedes the Thoroughfare Plan. As required by NCDOT, the CTP currently includes a Street & Highway Map, a Public Transportation & Rail Map, a Bicycle Map, and a Street & Highway table containing information such as road width, right-of-way width, traffic volumes and capacities, and the presence of transit and bicycle facilities. |
| <b>Conformity</b>   | Process to assess the compliance of any transportation plan, program, or project with air quality implementation plans. The conformity process is defined by the Clean Air Act.   |
| <b>Conformity Analysis</b>                                  | Demonstration that when the projects planned in the TIP and LRTP are implemented, the area will not exceed allowable motor vehicle emissions thresholds (emission budgets.)   |
| <b>Conformity Finding</b>                                   | Statement that the projects contained in the MTIP are essentially consistent with those listed in the LRTP and no new Conformity Analysis is needed to account for noted differences.   |
| <b>Congestion</b>   | The level at which transportation system performance is no longer acceptable to the traveling public due to traffic interference.   |
| <b>Congestion Management Processes (CMP)</b>                | A systematic process that provides information on transportation system performance to decision makers for selecting and implementing strategies to manage existing and handle new facilities so that traffic congestion is alleviated. Required for Transportation Management Areas.   |
| <b>Congestion Mitigation &amp; Air Quality (CMAQ)</b>       | Program directing funding towards transportation projects in non-attainment areas for ozone and carbon monoxide (CO). These projects will aid in achieving attainment.  |
| <b>Context Sensitive Solutions/Context Sensitive Design</b> | An approach to transportation decision-making and design that considers the communities and land uses which streets, roads, and highways pass through. Seeks to balance the need to move vehicles efficiently and safely with other desirable outcomes.   |
| <b>Daily Vehicle Miles Traveled (VMT)</b>                   | The total number of miles driven per day in a specified area by all vehicle types.  |
| <b>Deadhead Miles</b>                                       | Miles a transit or freight vehicle travels without passengers or cargo on board, respectively.  |
| <b>Demand Response System</b>                               | Passenger trips are generated by calls from passengers to the transit dispatcher who, on demand, responds by dispatching a vehicle to provide a trip – a non-fixed route transit system.  |
| <b>Destinations</b>   | The zone in which a trip terminates.  |

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| <b>Divided Highway</b>                          | A multi-lane facility with a positive barrier median or a median at least four (4) feet in width.   |
| <b>Donor State</b>                              | States that contribute more to the Highway Trust Fund than they receive back in Federal Highway project spending.   |
| <b>Emissions Budget</b>                         | The part of the State Implementation Plan (SIP) that identifies the allowable emissions levels mandated by the National Ambient Air Quality Standards (NAAQS), for certain pollutants. The emissions levels are used for determining attainment, in emission reduction strategies, maintenance demonstrations, etc.   |
| <b>Environmental Justice (EJ)</b>               | Environmental Justice (EJ) comes from Title VI of the Civil Rights Act (1964). Section 601 states, "No person in the United States shall, on the ground of race, color, or national origin be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." Section 602 of Title VI requires each federal department and agency to issue rules or regulations to ensure that programs and activities are in compliance with Title VI goals. |
| <b>Environmental Impact Statement (EIS)</b>     | Federally required environmental study for projects with potentially significant environmental effects.   |
| <b>Environmental Protection Agency (EPA)</b>    | The Federal regulatory agency responsible for administering and enforcing the Federal environmental laws, including the Clean Air Act, the Clean Water Act, etc.  |
| <b>Equity Formula</b>                           | Formula established in North Carolina in 1989 to divide Highway Fund and Highway Trust Fund dollars among NCDOT's fourteen (14) operations Divisions based on three primary elements: the uncompleted portion of the intrastate highway system; equal share; and population.  |
| <b>Exclusive Lane</b>                           | A preferential lane, separated from the general-purpose lanes, used for high occupancy vehicles.  |
| <b>Expressway</b>                               | A divided highway for through traffic with partial access control, including grade-separations at most, if not all, major intersections.  |
| <b>Federal Functional Classification System</b> | Federal Functional Classification is the system by which roads are grouped according to the type of service and amount of traffic the facility carries. Functional Classification is used to determine design standards of roads and determines Federal Aid funding eligibility. Functional Classification is assigned to roads using federal guidelines and is approved by FHWA.   |
| <b>Federal Highway Administration (FHWA)</b>    | The FHWA is part of the US Department of Transportation, responsible for administering all Federal-Aid Highway funds and programs.  |
| <b>Federal Transit Administration (FTA)</b>     | The FTA is part of the US Department of Transportation, responsible for administering all Federal-Aid public transportation funds and programs.   |
| <b>Fixed-Route Service</b>                      | Transit system where vehicles follow a predetermined route and schedule.  |
| <b>Forecasting</b>                              | The process of determining the future land use patterns, socioeconomic information, and trip-generating variables within a study area.  |
| <b>Freeway</b>                                  | A divided highway with full control of access, with no crossings at grade.  |
| <b>Functional Classification</b>                | Classification of urban and rural roadways based on their usage, capacity and speed. Generally, the classification will help determine such things as the road's width, the type of construction materials used, the design speed of the road, the right-of-way width, etc.   |
| <b>Greenway</b>                                 | A bicycle and pedestrian facility, separated from the roadway, that provides transportation and recreation opportunities for non-motorized modes of travel. Greenways are typically 10-12 feet wide and are usually established along natural corridors, such as rivers and creeks or along utility corridors, such as railroad rights-of-way or power lines.   |
| <b>Headway</b>                                  | The time interval between successive transit vehicles crossing a given point (i.e., time between buses along a transit route).  |

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| <b>Heavy Rail</b>   | Electric rail transit system with exclusive right-of-way and high volumes of passengers – generally called subways, elevated trains (els) and/or metros.   |
| <b>Highway Performance Monitoring System (HPMS)</b>             | The system used by the FHWA to provide information to Congress, the States, and the public on the extent and physical condition of the nation's highway system, as well as its use, performance and needs.   |
| <b>Horizon Year</b>   | The intermediate years identified within the Long Range Transportation Plan (LRTP) and Air Quality Conformity Determination Report in which projects must be complete and open for service and meet air quality conformity budgets determined within the State Implementation Plan (SIP). Generally, cover a ten-year span, but may be shorter in duration in the early years of the plan.                               |
| <b>Inspection and Maintenance Program (I/M)</b>                 | An emissions testing and inspection program implemented by states to ensure that the emissions control devices installed on vehicles are properly maintained.  |
| <b>Intermodal</b>   | The ability to connect different modes of transportation.  |
| <b>Intermodal Facility</b>                                      | A transportation system element that accommodates and interconnects different modes of transportation (i.e., park and ride lots, airports, bus terminals, train terminals, etc.)   |
| <b>Intermodal Surface Transportation Efficiency Act (ISTEA)</b> | Federal law that went into effect in 1991 that provided authorizations for highway, safety, and transit spending. The purpose of the act was to develop a nationwide intermodal transportation system that was economically and environmentally sound. It was replaced in 1998 by TEA-21 (which in turn was replaced by SAFETEA-LU in 2005).   |
| <b>Intermodal System</b>  | A transportation network for moving people and goods through various modes of transportation.  |
| <b>Interstate Highway System</b>                                | An integrated and managed system of expressways connecting most major US cities. Part of the National Highway System that receives special funding and maintenance considerations.   |
| <b>Lead Planning Agency (LPA)</b>                               | Official recipient of Section 104 (PL) funds designated under Title 23 of the US Code. The Lead Planning Agency (LPA) for the Winston-Salem Urban Area MPO is the City of Winston-Salem's Department of Transportation (WSDOT). As the LPA, WSDOT is the primary recipient of both State and Federal transportation planning funds. Also, the LPA is responsible for the day-to-day administration of all MPO functions. |
| <b>Legacy</b>   | <i>Legacy, A Development Guide for the New Century in Winston-Salem and Forsyth County, North Carolina</i> is the comprehensive plan prepared by the City-County Planning Board and adopted by all the jurisdictions in Forsyth County in 2001.  |
| <b>Legacy 2030 Update</b>                                       | Update of the <i>Legacy</i> Comprehensive Plan, recommended for adoption by the City-County Planning Board in August 2012.   |
| <b>Level of Service (LOS)</b>                                   | A set of qualitative descriptions of a transportation system's performance. The Highway Capacity Manual defines levels of service for intersection and highways operations, with ratings that range from A (the best) to F (the worst).  |
| <b>Life Cycle Analysis</b>                                      | Procedures for evaluating the economic worth of one or more projects or investments by discounting future costs of the life of the project or investment.  |
| <b>Light Rail</b>   | Electric rail transit systems with smaller capacities and designed to serve smaller areas than heavy rail systems – generally called streetcars and/or trolleys.   |
| <b>Link</b>   | A section of the highway network between two (2) points or nodes.  |
| <b>Local Street</b>   | Roadways used primarily for direct access to residential, commercial, industrial, or to other abutting property. They generally do not include roadways carrying through traffic.  |
| <b>Long Range Transportation Plan (LRTP)</b>                    | Federally mandated 20-year transportation plan that provides guidance in the development of an efficient, multi-modal transportation system.   |

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| <b>Maintenance Area</b>  | Any geographical region of the US that the EPA designates as a maintenance area for transportation-related pollutants for which NAAQS rules exist.  |
| <b>Metropolitan Area Boundary (MAB)</b>                                  | The boundary of the area within the MPOs transportation planning jurisdiction.  |
| <b>Metropolitan Planning Organization (MPO)</b>                          | The organization designated by law with lead responsibility for developing transportation plans and programs for urbanized areas with populations of 50,000 or more.  |
| <b>Mobile Source</b>   | Include motor vehicles, aircraft, seagoing vessels, and other transportation modes. The mobile source related pollutants are carbon monoxide (CO), volatile organic compounds (VOCs), nitrogen oxides (NOx), and particulate matter (PM <sub>2.5</sub> ).   |
| <b>Mobility</b>  | Ease of movement within the transportation system, a function of available transportation options and the abilities/ opportunities of the individual traveler. Individuals who are “mobility-limited” are those for whom it is difficult or impossible to use traditional transportation facilities.  |
| <b>Mode of Travel</b>  | Refers to the type of transportation used, such as automobile, transit, pedestrian, bicycle, etc.   |
| <b>Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21)</b> | Federal Act approved in July 2012 authorizing federal surface transportation programs through FY2014. Replaces SAFETEA-LU. Includes a focus on performance and outcomes, but continues many existing programs.  |
| <b>Multimodal</b>  | Used to describe a transportation system that is designed to serve more than one mode of transportation, such as autos, transit, bikes, sidewalks, etc.   |
| <b>Multi-Use Path or Share-Use Path</b>                                  | A bicycle and pedestrian facility, separated from the roadway, that provides transportation and recreation opportunities for non-motorized modes of travel.   |
| <b>National Ambient Air Quality Standards (NAAQS)</b>                    | Federal standards that set the allowable concentrations and exposure limits for various pollutants. The EPA developed the standards in response to the Clean Air Act.   |
| <b>National Environmental Policy Act (NEPA)</b>                          | The National Environmental Policy Act of 1969, as amended. Federal law that requires consideration of environmental impacts for all major expenditures of federal funds.  |
| <b>National Highway System (NHS)</b>                                     | The national transportation system designated by Congress that includes the Interstate Highway System and other nationally significant highways and thoroughfares used for interstate and interregional travel, national defense, intermodal connection, and interstate commerce.   |
| <b>Network</b>   | A system of links in a transportation system.   |
| <b>Node</b>  | A numbered point along a road section, usually located at intersections, used to break the road down into manageable sections, or links, for analysis.  |
| <b>Non-Attainment Area</b>   | A geographical region of the US that the EPA has designated as not meeting the adopted air quality standards. See also “Attainment Area”.   |
| <b>NOx</b>   | Oxides of Nitrogen: key precursor to smog. According to NCDAQ, roadway sources produce around 31% of total NC NOx emissions.  |
| <b>Origin</b>  | For transportation purposes, origin is defined as the location of beginning for a trip (the zone in which the trip begins).   |
| <b>Ozone (O<sub>3</sub>)</b>   | A colorless gas with a sweet odor. Ozone is not a direct emission from transportation sources. It is a secondary pollutant formed when VOCs and NOx combine in the presence of sunlight. Ozone is associated with smog or haze. While upper ozone layers protect us from harmful UV rays, ground-level ozone produces unhealthy air in which to live. |
| <b>Paratransit Vehicle</b>   | Any form of rubber-tired, high-occupancy vehicle, such as a taxi, van, etc., that is available for hire to the public. They generally do not operate on a fixed route or schedule.  |
| <b>Particulate Matter (PM)</b>   | Any material that exists as solid or liquid in the atmosphere. Particulate matter may be in the form of fly ash, soot, dust, fog, fumes, etc.   |
| <b>Passenger Miles</b>   | The sum of the distance ridden by each passenger.   |
| <b>Peak Direction</b>  | The higher demand direction during a peak commuting period.   |

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| <b>Peak Hour</b>   | The one-hour period during which the maximum amount of travel occurs. Generally there is a morning peak and an afternoon peak. Peak hours can apply to road sections, uses, etc., depending on the analytical need.   |
| <b>Preliminary Engineering</b>   | First phase of project construction whereby the project scope and design are begun.   |
| <b>Prospectus</b>  | Document outlining responsibilities and procedures for carrying out the cooperative transportation planning process. Defines ongoing work tasks cited in the Planning Work Program.   |
| <b>Public Participation</b>  | The active and meaningful involvement of the public in the development of transportation plans and programs.  |
| <b>Public Participation Policy</b>   | Policy adopted based on the MPO's commitment to public participation for all transportation plans and air quality conformity analysis reports. The process described in the policy provides for early and continuing involvement; full public access to citizens, public agencies, transportation providers and segments of the community affected by transportation plans; and clear, accurate, and timely information.          |
| <b>Rural Planning Organization (RPO)</b>   | RPOs are partnerships among non-MPO counties, established to provide rural areas a greater voice in state transportation decisions affecting those areas.   |
| <b>Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)</b> | Federal Act authorizing surface transportation programs for highways, highway safety, and transit for the 5-year period 2005-2009. Replaced TEA-21. Included new programs, but continued many TEA-21 programs and initiatives. Replaced by MAP-21 in 2012.  |
| <b>Safe Routes to School (SRTS)</b>  | A federally program that provides funding to elementary and middle schools to study and improve conditions for bicycling and walking near those schools. The program aims to increase the number of students who bike and walk to school through improvements in infrastructure, education, encouragement, and enforcement of applicable laws.  |
| <b>Section 104(f) PL</b>   | Funds distributed through the Federal Highway Administration (FHWA) for transportation planning tasks.  |
| <b>Shared Lane Marking or "Sharrows"</b>   | Pavement marking consists of a bicycle symbol with two chevrons above it in locations where cyclists are being encouraged to ride, but there is not enough room to install a bicycle lane. Alerts motorist about the presence of bicycles and assists bicyclists with lane positioning.   |
| <b>Sidewalk</b>  | A bicycle and pedestrian facility that parallels the roadway, but is separated from it. A sidewalk facility is similar to that of a greenway, while its location is similar to that of a sidewalk.  |
| <b>SPOT Process</b>  | A project prioritization process developed the NCDOT Strategic Planning Office of Transportation (SPOT) as part of the NCDOT's Transportation Reform Process to assure professional, transparent and strategic decision making for transportation projects. The process uses facts about pavement condition, traffic congestion and road safety, as well as input from local governments and NCDOT staff to determine priorities. |
| <b>Stakeholders</b>  | An individual or organization involved in or affected by a transportation planning process  |
| <b>State Implementation Plan (SIP)</b>   | A plan mandated by the Clean Air Act that contains procedures to monitor, control, maintain, and enforce compliance with the NAAQS. Includes modeling analysis and demonstration that the air in an area will meet NAAQS.   |
| <b>State Transportation Improvement Program (STIP)</b>   | North Carolina's multiyear program of transportation projects that is comprised of all the MPO's Transportation Improvement Programs (MTIPs).   |

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| <b>Street Connectivity</b>  | The directness of routes and the density of the connections in the road network. A well-connected street system will have with multiple routes and connections serving the same origins and destinations.  |
| <b>Thoroughfare</b>   | Part of the roadway system serving as the principal network for through traffic flow. Thoroughfares connect areas of principal traffic generation to other such areas.   |
| <b>Traffic Analysis Zone (TAZ)</b>  | A unit of geography most commonly used in conventional transportation planning models. Conforms to US Census block geography for data analysis purposes. Size of TAZs range, based on density of population or employment.   |
| <b>Transportation Control Measure (TCM)</b>                               | Actions to adjust traffic patterns or reduce vehicle use to improve air quality through reduced vehicular emissions. These may include HOV lanes, ridesharing, telecommuting, biking, etc., that may be included in a SIP.   |
| <b>Transportation Demand Management (TDM)</b>                             | The application of strategies and policies to reduce travel demand (specifically that of single-occupancy vehicles), or to redistribute travel demand in space or in time.   |
| <b>Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21)</b> | Legislative initiative by the US Congress that funds transportation programs for fiscal years 1998-2003. TEA-21 authorized increased levels of highway and transportation funding and continues ISTEA planning and funding provisions with minor modifications. Replaced by SAFETEA-LU in 2005.  |
| <b>Transportation Improvement Program (TIP)</b>                           | Program of transportation projects drawn from or consistent with the Long-Range Transportation Plan (LRTP) and developed pursuant to Title 23 of the US Code and the Federal Transit Act.  |
| <b>Transportation Management Area (TMA)</b>                               | An area designated by the US Secretary of Transportation, having an urbanized area population of over 200,000. In addition to meeting all the federal requirements for an urbanized area and MPO, TMAs are also responsible for developing congestion management systems, TIP project selection, and are subject to a joint federal certification review of the planning process at least every three years. |
| <b>Triad Early Action Compact</b>   | A voluntary agreement among local governments in the Triad, the State of North Carolina and EPA adopted in the mid-2000s to implement strategies to reduce emissions. The compact is no longer applicable due to changes in federal emission standards.  |
| <b>Unified Planning Work Program (UPWP)</b>                               | A document that describes urban transportation and transportation related activities to be undertaken during the fiscal year. The UPWP is prepared by the MPO, in consultation with the Transportation Planning Branch of NCDOT.   |
| <b>United States Department of Transportation (USDOT)</b>                 | The principal Federal-funding agency for transportation facilities and programs. Includes the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), the Federal Railroad Administration (FRA), and others.  |
| <b>Urbanized Area (UA)</b>  | Area that contains a municipality with a population of at least 50,000, plus the surrounding urbanized areas that meet set size and density criteria.  |
| <b>Vehicle Miles Traveled (VMT)</b>                                       | The sum of distances traveled by all motor vehicles in a specified region for a specified period of time.  |
| <b>Visualization</b>  | The formation of mental visual images, or the act or process of interpreting in visual terms or putting into visible form. Examples of visualization techniques include sketches, drawings, artist renderings, physical models and maps, stimulated photos, videos, computer modeled images, interactive GIS, GIS based scenario planning tools, photo manipulation and computer simulation.                 |
| <b>Volatile Organic Compounds (VOC)</b>                                   | VOC's come from vehicle exhaust, paint thinners, solvents, and other petroleum-based products.   |