

Traffic problem

[Transportation](#), [Road](#)



Interstate 80, seen here in Berkeley, California, is a freeway with many lanes and heavy traffic. Traffic on roads may consist of pedestrians, ridden or herded animals, vehicles, streetcars and other conveyances, either singly or together, while using the public way for purposes of travel. Traffic laws are the laws which govern traffic and regulate vehicles, while rules of the road are both the laws and the informal rules that may have developed over time to facilitate the orderly and timely flow of traffic. Organized traffic generally has well-established priorities, lanes, right-of-way, and traffic control at intersections.

Traffic is formally organized in many jurisdictions, with marked lanes, junctions, intersections, interchanges, traffic signals, or signs. Traffic is often classified by type: heavy motor vehicle (e. g., car, truck); other vehicle (e. g., moped, bicycle); and pedestrian. Different classes may share speed limits and easement, or may be segregated. Some jurisdictions may have very detailed and complex rules of the road while others rely more on drivers' common sense and willingness to cooperate. Organization typically produces a better combination of travel safety and efficiency.

Events which disrupt the flow and may cause traffic to degenerate into a disorganized mess include: road construction, collisions and debris in the roadway. On particularly busy freeways, a minor disruption may persist in a phenomenon known as traffic waves. A complete breakdown of organization may result in traffic congestion and gridlock. Simulations of organized traffic frequently involve queuing theory, stochastic processes and equations of mathematical physics applied to traffic flow. Traffic in English is taken from the Arabic word *taraffaqa*, which means to walk along slowly together.

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Rules of the road[edit]

Traffic controller in Chicago, Michigan Avenue

Traffic control in Rome, Italy. This traffic control podium can retract back to road level when not in use. Rules of the road and driving etiquette are the general practices and procedures that road users are required to follow. These rules usually apply to all road users, though they are of special importance to motorists and cyclists. These rules govern interactions between vehicles and with pedestrians. The basic traffic rules are defined by an international treaty under the authority of the United Nations, the 1968 Vienna Convention on Road Traffic.

Not all countries are signatory to the convention and, even among signatories, local variations in practice may be found. There are also unwritten local rules of the road, which are generally understood by local drivers. As a general rule, drivers are expected to avoid a collision with another vehicle and pedestrians, regardless of whether or not the applicable rules of the road allow them to be where they happen to be.

In addition to the rules applicable by default, traffic signs and traffic lights must be obeyed, and instructions may be given by a police officer, either routinely (on a busy crossing instead of traffic lights) or as road traffic control around a construction zone, accident, or other road disruption. These rules

should be distinguished from the mechanical procedures required to operate one's vehicle. Seedriving. Directionality

Main articles: Bidirectional traffic and right- and left-hand traffic Traffic going in opposite directions should be separated in such a way that they do not block each other's way. The most basic rule is whether to use the left or right side of the road. Traffic regulations

See also: Category: Rules of the road

In many countries, the rules of the road are codified, setting out the legal requirements and punishments for breaking them. In the United Kingdom, the rules are set out in the Highway Code, which includes obligations but also advice on how to drive sensibly and safely. In the United States, traffic laws are regulated by the states and municipalities through their respective traffic codes. Most of these are based at least in part on the Uniform Vehicle Code, but there are variations from state to state. In states such as Florida, traffic law and criminal law are separate, therefore, unless someone flees a scene of an accident, commits vehicular homicide or manslaughter, they are only guilty of a minor traffic offense. However, states such as South Carolina have completely criminalized their traffic law, so, for example, you are guilty of a misdemeanor simply for travelling 5 miles over the speed limit.

Organized traffic

Priority (right of way)[edit]

See also: Right-of-way (disambiguation)

Vehicles often come into conflict with other vehicles and pedestrians because their intended courses of travel intersect, and thus interfere with

each other's routes. The general principle that establishes who has the right to go first is called "right of way", or "priority". It establishes who has the right to use the conflicting part of the road and who has to wait until the other does so. Signs, signals, markings and other features are often used to make priority explicit. Some signs, such as the stop sign, are nearly universal.

When there are no signs or markings, different rules are observed depending on the location. These default priority rules differ between countries, and may even vary within countries. Trends toward uniformity are exemplified at an international level by the Vienna Convention on Road Signs and Signals, which prescribes standardized traffic control devices (signs, signals, and markings) for establishing the right of way where necessary. Crosswalks (or pedestrian crossings) are common in populated areas, and may indicate that pedestrians have priority over vehicular traffic. In most modern cities, the traffic signal is used to establish the right of way on the busy roads.

Its primary purpose is to give each road a duration of time in which its traffic may use the intersection in an organized way. The intervals of time assigned for each road may be adjusted to take into account factors such as difference in volume of traffic, the needs of pedestrians, or other traffic signals. Pedestrian crossings may be located near other traffic control devices; if they are not also regulated in some way, vehicles must give priority to them when in use. Traffic on a public road usually has priority over other traffic such as traffic emerging from private access; rail crossings and drawbridges are typical exceptions.

Uncontrolled traffic

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Uncontrolled traffic comes in the absence of lane markings and traffic control signals. On roads without marked lanes, drivers tend to keep to the appropriate side if the road is wide enough. Drivers frequently overtake others. Obstructions are common. Intersections have no signals or signage, and a particular road at a busy intersection may be dominant – that is, its traffic flows – until a break in traffic, at which time the dominance shifts to the other road where vehicles are queued. At the intersection of two perpendicular roads, a traffic jam may result if four vehicles face each other side-on.

Traffic Problems

Traffic congestion in many cities around the world is severe. One possible solution to this problem is to impose heavy taxes on car drivers and use this money to make public transport better. This essay will discuss the benefits and drawbacks of such a measure. One of the first benefits of such a measure is that the heavy taxes would discourage car owners from using their cars because it would become very expensive to drive. This would mean that they would begin to make use of public transport instead, thus reducing traffic problems and pollution as well. Another benefit would be that much more use would be made of public transport if it was improved. It is often the case that public transport in cities is very poor.

For example, we often see old buses and trains that people would rather not use. High taxes would generate enough money to make the necessary changes. Nevertheless, there are drawbacks to such a solution. First and foremost, this would be a heavy burden on the car drivers. At present, taxes are already high for a lot of people, and so further taxes would only mean

less money at the end of the month for most people who may have no choice but to drive every day. In addition, this type of tax would likely be set at a fixed amount. This would mean that it would hit those with less money harder, whilst the rich could likely afford it. It is therefore not a fair tax. To conclude, this solution is worth considering to improve the current situation, but there are advantages and disadvantages of introducing such a policy.

Traffic management

Creating a travel plan

One of the most effective ways to ease traffic congestion at schools is to reduce the number of cars coming and going from your school. Boards of trustees can encourage students and staff to walk, cycle, take public transport, ride the school bus, participate in a walking school bus or car pool to school. Another way to manage traffic is to prepare a travel plan for traffic movement in and around the school, parking and pedestrians. Developing a travel plan with your community will get people thinking about alternative options for getting to and from school.

Complete the Traffic management checklist [Word; 92kb] before preparing the travel plan. Guidance on developing a travel plan is available at: NZ Transport Agency - provides a guide for developing school travel plans and organising a walking school bus Safe Kids New Zealand - has resources for educators about keeping kids safe including child pedestrian safety NZ

Police - has a School Road Safety

Education programme which teaches young people road safety skills. Check with your local council as they often have information about safety on the

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road. For example, Auckland Transport has information about road safety, walking and cycling, and encouraging students to use alternative transportation; Christchurch City Council has a programme called Safe Routes to Schools which investigates road safety issues in school communities and develops strategies to encourage safe and active travel to school. Improving traffic movement through the school

A good system for dropping off and picking up students will help manage traffic around and through the school. The system will depend upon the school, for example, if the school is located in an urban area with busy streets, coordinating traffic in and out of the school during peak times is critical, otherwise drivers are tempted to park illegally in the surrounding neighbourhood. Illegal practices include double parking and parking on yellow lines, across driveways, and near crossings. Many drivers justify this behaviour because they are only parked for a short time and they usually stay with the car. However, this practice is irritating for neighbours and unsafe for other road users. Traffic movement checklist

A good traffic system through the school includes:
car traffic flows in a clearly marked oneway direction
pedestrian access points located separately from car access points the bus bay is separated from car and pedestrian access points an off-street drop-off/pick-up zone
staff station at key points to manage traffic flow
car access separate from the car park.

If your school does not have land available to create an on-site drop-off/pick-up zone, you can contact the local council and ask for a dedicated kerbside

access area on an adjacent street, if there are traffic issues. An example of an efficient traffic system

Other ideas for improving the flow of traffic include: staggering start and finish times for different year groups having staff to manage drop-offs and pick-ups at peak times will encourage cars to move along and not park. Paying for work to improve traffic systems

Boards can use Five Year Agreement (5YA) funding for work to improve traffic systems on their school site. Work needs to be planned in the 10 Year Property Plan (10YPP), and budgeted within the available 5YA funding. Car parking

Boards of trustees should have a parking policy about who can use the car parks on the school site. The policy will usually provide for staff and some visitors' car parks. It is likely that there are not enough parks for students at a secondary school, which can create congestion in the neighbourhood. Schools can talk to their local council, including parking enforcement officers familiar with the area, for ideas about managing the school's parking issues. New car parks

The need for new or upgraded car parks may be triggered by new teaching spaces for roll growth space. In the new teaching spaces budget, boards are given a site works allowance for each roll growth classroom to pay for new car parks. The Ministry does not have a policy on the number of car parks schools should have, but local councils may have requirements in their

District Plans that kick in when the school applies for building consent for a roll growth room or other type of project.

The council may require a traffic impact assessment. If the costs of new parks exceed the site works allowance, either because of the number required by the council or their cost, then additional funding will be considered. If the board wants car parks in excess of the council requirement, this must be funded through 5YA.

Special events – parking

Special events can cause parking problems. Ideas to manage these problems include: encouraging people to walk, car pool or use public transport opening up some of the grounds, such as playing fields or tennis courts, to provide extra parking arranging the use of nearby parking facilities arranging the use of remote parking facilities and provide shuttles to the event employing staff to direct traffic.

Traffic impact assessments

When a school applies for a building consent for a new building project the council may ask for a traffic impact assessment. The council will want to know if the proposed project will generate extra traffic and a need for additional parking, and how the school intends to manage the changes in traffic or parking. For larger projects, the council may require a professionally-prepared traffic impact assessment with an engineer's report. Ask your council for names of companies who carry out these assessments or search the internet for traffic assessment consultants.

Traffic requirements vary depending on what the council has in their district plan. Some councils may require more parking spaces to be provided and some may have traffic requirements depending on the educational use, breaking them down by primary, secondary and tertiary institutions. Other councils may have more general requirements. Schools will have to convince the council they are managing parking and traffic flows - having a good travel plan and traffic system will help. Boards should ensure their school community are not causing traffic and parking problems for neighbours because those neighbours may object to a school's building consent application. Traffic management checklist

The following checklist will be helpful:

before starting the travel plan

for use by the professional consultant hired to prepare a traffic impact assessment - the assessment should address these issues as a minimum and providing this information will reduce the time and therefore cost of a consultant.