



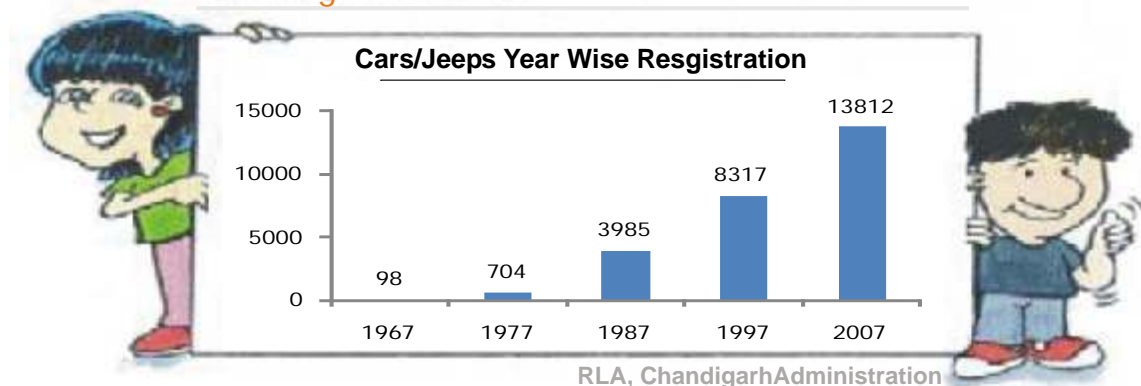
ENVIS CENTRE, CHANDIGARH

NewsLetter

P a r y a v a r a n - P a t r a

Chandigarh
State of Environment
Transportation in Chandigarh

Chandigarh Statistics



EDITORIAL

Transportation is life line of the modern cities. Chandigarh is one of the planned and most urbanized cities of India. Railway, ISBT (Inter State Bus Terminus), and Airport connects Chandigarh to rest of the India. Local buses of Chandigarh cover all the parts of the city. Other private vehicles like cars, autos, and trucks etc also are part of the city's life. Various departments of UT Chandigarh provide services like registration, renewal, cancellation, traffic control, and pollution check etc to regulate and monitor vehicles in Chandigarh. Recent surveys have found Chandigarh, the most walkable city with zero congestion index. The city has the wider roads among the studied major cities of India.

Chandigarh has highest density of vehicles, over 6 lakh vehicles in 114 sq. km. of area, and highest ratio of per capita vehicles in India. This compromise, somewhere, with the air quality of Chandigarh. The emissions from these vehicles pollute the air of the city. State Transport Authority has made 'PUC' (Pollution Under Control) certificates compulsory for every vehicle. Pollution Check Centres are established in all the parts of the city. Awareness camps and grants for the same are issued by Department of Environment, Chandigarh Administration. Battery operated vehicles are promoted and subsidized by Department of Science and Technology, Chandigarh Administration. Chandigarh Traffic Police also organize various exhibitions and awareness camps regularly. Segregation of slow moving traffic on V-8 roads and synchronization of traffic lights have been taken up by Administration. Concluding, Chandigarh has a well established and rich public and private transportation system. More of awareness among residents to take vehicles as utility and not luxury is being carried out. It is responsibility of all to understand and minimize use of motorized vehicles but walk and cycles.

SPO, ENVIS Centre

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TRANSPORT

Transport or transportation is the movement of people and goods from one place to another. The term is derived from the Latin *trans* ("across") and *portare* ("to carry"). Industries which have the business of providing transport equipment, transport services or transport are important in most national economies, and are referred to as transport industries.

Wider, well maintained roads, and ample parking space all over the Chandigarh, make it convenient to use private vehicles for local transport. Public buses maintained by the Chandigarh Transport Undertaking (CTU), an undertaking of the Chandigarh Administration, provide local transport as well as inter-state transport services. The Chandigarh Traffic Police oversees the implementation of the traffic rules and is widely credited for a fairly orderly traffic system. The Traffic Park in Sector 23 introduces children, rickshaw-pullers, and new drivers to traffic safety. Rickshaws are common for traveling short distances, especially by school-going children, housewives, and the elderly. Auto-rickshaws are limited and most often ply to and from the ISBT. Most of the heavy traffic roads now have rickshaw lanes, which the rickshaw-pullers must adhere to compulsorily. The city also boasts of a well established network of modern cabs.

Chandigarh is well connected by road. The two main National Highways (NH) connecting Chandigarh with the rest of the country are: NH 22 (Ambala - Kalka - Shimla - Kinnaur) and NH 21 (Chandigarh - Leh). Chandigarh has two Inter-State Bus Terminus (ISBT), one in Sector 17 and second in Sector 43.

Chandigarh has a railway station located about 7-8 km away from the ISBT. Regular train connections are available to the national capital New Delhi and to some other junctions like Kalka, Ambala, Amritsar, Bhiwani, Howrah, Mumbai, Chennai, Trivandrum and Sri Ganganagar.

Chandigarh also has a domestic airport located nearly 11-12 kilometers from the ISBT. Its name is Chandigarh Airport. The airport is under process of becoming an international airport. Transport system of Chandigarh is one of the most organized system in India.

<http://en.wikipedia.org/wiki/chandigarh>

ROADS

The grid based network of roads of Chandigarh ensures smooth movements of traffic. There are no twists and turns on the roads except the entry points to the sectors. Besides this roads have been developed to segregate slow moving traffic from the fast moving traffic i.e. V8 roads. These roads, also called 'Cycle-Rikshaw Path', are open for cycle and rikshaws.



VEHICLE REGISTRATION IN CHANDIGARH

Type of Vehicle	2005	2006	2007
Four Wheeler	10265	12080	13812
Motor Cycles, Scooters and Moped	19216	20649	19170
Auto Rickshaws/Three Wheeler	86	79	72
Buses	93	102	88
Goods Vehicles etc.	34	44	81
Tractors	6	14	33

The vehicular population in the city is increasing day by day since 1971. The number of vehicles per household is over two in Chandigarh. Registered motorized vehicles have increased by 54 times since 1971. The number of vehicles in Chandigarh has risen from 573035 to 6,69,715 i.e. by over 18% since 2004. Thousands of vehicles get registered every year in Chandigarh.

The data indicates that every year registration of four wheelers is increasing in numbers.

CHANDIGARH TRANSPORT UNDERTAKING

CTU Stat: Year Wise

Category	2005	2006	2007
Inter State Passengers Travelled Per Day (CTU Buses)	69500	72000	75000
Local Passengers Travelled Per Day (CTU Buses)	83000	85800	87500
Total Passengers Travelled Per Day (CTU Buses)	152500	157800	162500
Capacity Per Bus (CTU Buses)	52	52	52
Staff Position of CTU	2328	2286	2294
Pollution Check Standard Per Bus	64	64	64

Chandigarh Transport Undertaking (CTU) has also become important factor in daily life of commuters. Chandigarh has rich public transportation system which runs all day long on the wider roads of Chandigarh. Not only number of private vehicles but number of passengers using public transportation is also increasing. In total 162500 people travels in a day by CTU buses (year 2008). It means nearly 6 Cr. Commuters in a year who use CTU services. To cater this, Chandigarh Transport Unit has 2294 employees as staff members. These figures are related to CTU only. Buses from other states are also operating in Chandigarh like Punjab, Haryana, and Himachal etc.

Bus Stand

Buses Trips

I.S.B.T. Sector 17 Long Route (Including Others)	400	600
I.S.B.T. Sector 17 Local Bus Stand CTU	153	1660
I.S.B.T. Sector 17 Long Route CTU	118	320
I.S.B.T. Sector 43 Long Route CTU	138	154
I.S.B.T. Sector 43 Local Bus Stand CTU	62	1280
I.S.B.T. Sector 43 Long Route (Including Others)	1475	1600

Director Transport, U.T. Chandigarh



Old Style Buses



New Style Buses

TOURIST VEHICLES

Chandigarh is a place of attraction for thousands of tourists. Chandigarh has seen 928159 domestic tourists and 26567 international tourists in year 2007. Many from neighbouring states visit Chandigarh's attractions by private vehicles. There are 2400 registered all India tourist taxies and 17 tourist buses.

AIRPORT

Chandigarh has a military base airport which is also used for domestic flights which connects Chandigarh to rest of India by air. It is in pipeline that the Chandigarh Airport soon would become an International Airport, named Chandigarh International Airport. The airport is currently undergoing construction of an integrated passenger terminal and many other facilities.

RAILWAYS

Chandigarh is well connected to rest of India by railway also. Chandigarh Railway Station is about 7-8 kms from City Centre. There are 16 trains going up and down. Out of these 14 trains run on electricity and two are on diesel. The data clearly shows that number of passengers commuting per day is increasing gradually. This is due to the new opportunities arriving in Chandigarh recently in IT and other sectors like tourism. Chandigarh railway station is a busy place with 7000 commuters every day.

Railways

Fields

2005

2006

2007

No of Railway Stations

1

1

1

Length of Railway Lines (in km)

8

16

16

People Travelled Per Day in Trains

5000

5500

7000

Railways

Fields

Values

2007

Per Day Trains (Up)

16

2007

Per Day Trains (Down)

16

2007

Trains on Diesel (Up + Down)

2+2

2007

Trains on Electricity

14

2007

Trains on Coal

Nil

Station Superintendent, Chandigarh (N.R.)

Vehicles are major source of air pollution in Chandigarh. Primary pollution from motor vehicles is emitted directly into the atmosphere, whereas secondary pollution results from chemical reactions between pollutants after they have been released into the air. Carbon monoxide, ozone, particulate matter, and the other forms of pollution can cause smog and other air quality concerns, but there are vehicular emissions that contribute to a completely different pollution issue: Global Warming. Toxic air pollutants may even cause cancer or other serious health effects, such as reproductive effects or birth defects. Air pollutants may also cause adverse environmental and ecological effects. Vehicular population is major source of toxic air pollutants. Examples of toxic air pollutants include benzene.

Norms

CO(g/km)

HC+NOx(g/km)

1991 Norms

14.3-27.1

2.0(Only HC)

1996 Norms

8.68 - 12.40

3.00 - 4.36

1998 Norms

4.34 - 6.20

1.50 - 2.18

India stage 2000 norms

2.72

0.97

Bharat stage - II

2.2

0.5

Bharat Stage - III

2.3

0.35(combined)

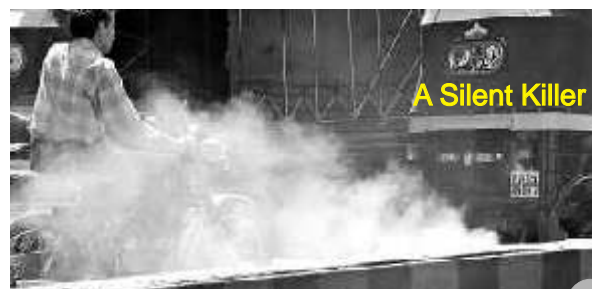
Bharat Stage - IV

1.0

0.18(combined)

EMISSION NORMS FOR PASSENGER CARS

- ⊗ Vehicular pollution is major cause of increasing allergies.
- ⊗ Vehicular pollution cause smog and irritation to eyes.
- ⊗ Vehicular pollution affects lungs of human being.
- ⊗ Vehicular pollution affects plants also and hence environment.
- ⊗ Vehicular pollution is least bothered by daily commuters and hence acting as silent killer.



POLICY FOR CLEANER AIR

The Cabinet which includes three Ministries, Finance, Petroleum and Surface Transport, cleared the first "National Auto Fuel Policy" laying the roadmap for the next decade on the quality of fuels and the standards for vehicles. According to their policy, the 11 most polluted cities, including the three metros (plus Ahmedabad, Hyderabad, Surat, Pune, Kanpur, Agra, and Bangalore), will only catch up with Delhi by 2005 and the rest of the country by 2010. The state road transport authorities will monitor vehicles; the Petroleum Ministry will ensure fuel quality while the Ministry for Road Transport and Highways will keep a tab on engine specifications. Also, the usage of CNG/LPG would be encouraged in cities affected by high vehicular pollution.

Norms	CO (g/kmhr)	HC (g/kmhr)	Nox (g/kmhr)	PM (g/kwhr)
1991 Norms	14	3.5	18	-
1996 Norms	11.2	2.4	14.4	-
India stage 2000 norms	4.5	1.1	8.0	0.36
Bharat stage-II	4.0	1.1	7.0	0.15
Bharat Stage-III	2.1	1.6	5.0	0.10
Bharat Stage-IV	1.5	0.96	3.5	0.02

EMISSION NORMS FOR HEAVY DIESEL VEHICLES

HC+NOx(g/km)	CO(g/km)	HC+NOx(g/km)
1991 Norms	12-30	8-12 (only HC)
1996 Norms	4.5	3.6
India stage 2000 norms	2.0	2.0
Bharat stage-II	1.6	1.5
Bharat Stage-III	1.0	1.0

CHANDIGARH ADMINISTRATION

Thousands of vehicles are added every year to the roads of the city in the same given, well defined area. Presently more than six lakh vehicles of UT and lakhs of vehicles from neighboring states are running on the roads of Chandigarh. To monitor, control, and regulate these, Chandigarh Administration has established offices of Registering and Licensing Authority, State Transport Authority, and Chandigarh Traffic Police.

REGISTRATION AND LICENSING AUTHORITY (RLA) CHANDIGARH

RLA offers various services like learners license, regular license, duplicate license, renewal of DL, renewal of license of other state, addition of another class of vehicle, international driving license, new registration, renewal of RC, duplicate RC, registration of other states vehicle to be assigned new mark, transfer of ownership in case of auction, transfer of ownership within state, transfer of ownership in death case, for finance termination, endorsement of finance/hypothecation agreement, for NOC(no objection certificate). RLA office is located in Sector 17, Chandigarh.

STATE TRANSPORT AUTHORITY (STA)

The State Transport Authority, Chandigarh has been set up by the Chandigarh Administration under the provision of the Motor vehicle Act 1988 which comprises of the Official and Non official members. The Home Secretary, Chandigarh Administration is its Chairman and an Officer of H.C.S/P.C.S. Cadre serving in the Chandigarh Administration is appointed as Ex-Officio Secretary, State Transport Authority, U.T., Chandigarh. STA offers various services like Registration of Tourist Vehicles, Tourist Taxis/Tourist Buses/AC Taxis, Renewal of Permit of Tourist vehicle, Issuance of Permits to Commercial Vehicles, Transfer of ownership within the State, Renewal of Goods Carriage Permit, Issuance of National Permit and its Renewal, and Goods Carrier Vehicle etc. STA is located in Sector 18, Chandigarh.

EMISSION NORMS FOR TWO WHEELERS

HC+NOx(g/km)	CO(g/km)	HC+NOx(g/km)
1991 Norms	12-30	8-12 (only HC)
1996 Norms	4.5	3.6
India stage 2000 norms	2.0	2.0
Bharat stage-II	1.6	1.5
Bharat Stage-III	1.0	1.0

CHANDIGARH TRAFFIC POLICE

The Chandigarh Traffic Police was sanctioned as a separate unit, distinct from the District Police, in the year 1974. Today, it is headed by a Superintendent of Police who is assisted by a Deputy Superintendent of Police and Traffic Inspectors. The Road Safety Cell (RSC) of the traffic police is located at the Chandigarh Traffic Park, Sector 23 A and is headed by a Sub-Inspector. For any query regarding the Driving Tests, visit to the Road Safety Cell, an exhibition /lecture on Road Safety, regarding the Road Accident contact the Incharge, RSC or send the query by e-Mail. In order to give more teeth to its enforcement efforts the traffic police has inducted state-of-the-art interceptor gypsies. Each vehicle is equipped with a Handycam (for spot videography), a speed radar, an Alco sensor IV (to check drunken driving), a lux meter (to check light transmission of window films), a voice recorder, a first-aid kit, a digital camera, reflective cones and blinkers for night checking and a P.A. System.



Roundabout and Traffic at Chandigarh

DEPARTMENT OF SCIENCE AND TECHNOLOGY

Due to increased number of vehicles on the Chandigarh roads, obnoxious gases are increasing in the atmosphere. So, to promote battery operated vehicles(two wheelers) in city, Department of Science and Technology is providing subsidy to residents of Chandigarh at rate of 5000 or 15% of the total cost whichever is more. Besides this the department has helped other government organizations like CPCC to buy Battery Operated Cars.

WHAT YOU CAN DO

All required is just initiative! Yes you may contribute a lot that would benefit community as well as your personal health and pocket. Following are some suggestive measure that can be taken to restrict extravagant use of vehicles:

- ☺ Carpooling: You may form a group of people who are serving in close proximity of your office. Now, instead everybody drives a single car individually, every group member would drive other members to their destination on his/her turn. You may cut the cost by many times and making noble contribution to cleaner air also .
- ☺ Use public transportation: Use public transportation instead of private vehicles to save fuel as well as Environment.
- ☺ Try to use your car less; use a cycle if you can: Distance which can be covered by cycle should be covered by cycle and not by car.
- ☺ Use alternative fuel: Use alternative fuel, such as biodiesel and solar energy, that produce much less air pollutants.
- ☺ Battery Operated Vehicles: Avail benefit of subsidy by Chandigarh Administration for battery operated vehicles and contribute to cleaner Air.
- ☺ Follow Rules: Abide your driving by rules and regulation of traffic.
- ☺ Give time to your vehicle: Don't overload and get your vehicle serviced on time.



Dear Information Seeker,

ENVIS CENTRE, Chandigarh furnishes you with the services to collect and disseminate information related to environment of Chandigarh. To share information with us you are requested to fill up the form given below.



Your feedback is valuable to us and will be highly appreciated

- Name _____
- Designation _____
- Department _____
- Address _____
_____ City _____
- State _____ Country _____ Pin _____
- Phone _____ Fax _____
- Email _____

Your views on scope of improvement :

- Interest Area _____

I would like to have information on following :



At the End of...

ENVIS CENTRE, CHANDIGARH

Newsletter

P a r y a v a r a n - P a t r a

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(Project Coordinator)

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(Sr. Programme Officer)

Mrs. Shikha Aggarwal
(Web Assistant)

Mr. Surinder Kumar
(Data Entry Operator)

HOW TO MANAGE VEHICLES

Exhaust emissions are at best unhealthy. At worst they can be fatal. Both petrol and diesel engines produce carbon monoxide, soot and other contaminants. Vehicles should not have:-

- A rich idle mixture or incorrect air/fuel ratios
- A dirty air filter
- An incorrectly adjusted carburetor
- Defective spark plugs or worn distributor contacts
- A faulty ignition coil
- Improper timing
- Vacuum leaks, burned valves, worn rings and head gasket leaks.

DRIVE SMART-SAVE FUEL, PROTECT THE AIR

It is the duty of all to keep air clean and worth breathing. All the vehicles should be checked and monitored regularly to reduce the amount of air contaminants in order to reduce their damaging effects. If the engine is producing high levels of contaminants, it's not burning fuel as well as it could. This costs us money and damages the environment. The way we drive and how well we look after the engine can affect how much air pollution comes from our vehicle. For this, act as suggested below:

- Drive smoothly and accelerate slowly.
- Travel light and don't carry unnecessary loads.
- Plan ahead to avoid short trips and unnecessary use of your vehicle.
- Don't overfill your fuel tank.
- Don't idle the engine unnecessarily.
- Use air conditioning sparingly.
- Ensure that the vehicle you buy is fuel-efficient.

**Drive Smart
Don't Engage in Road Rage**



Safety on road is every commuter's right. Don't violate it by rash driving or handing over vehicle to child. This not only put people in direct danger but indirectly too by destroying vital environment i.e. Air.

USEFUL ENVIRONMENTAL WEB LINKS

www.chdtransport.gov.in
www.citcochandigarh.com

www.cpcb.nic.in
www.chandigarhtrafficpolice.org

FROM :

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To,

Book Post

Note : While every care has been taken in compilation of the information available for this newsletter. However, readers must make thorough confirmation/enquiries at their own level before acting upon any data/information provided to the readers. Any discrepancy brought in the notice of ENVIS CENTRE, Chandigarh will be highly appreciated.

