Research Paper
Impact Factor: 4. 695
Peer Reviewed & Indexed Journal

IJMSRR
E- ISSN - 2349-6746
ISSN -2349-6738

AN ECONOMIC ANALYSIS ON SERVICE SECTOR WITH SPECIAL REFERENCE TO ROADWAYS, HIGHWAYS IN USA AND INDIA

Dr. Padmini S.V
Assistant Professor, Department of Studies in Economics, University College of Arts, Tumkur University, Tumkur.

Abstract
In the modern era service sector is gaining increasing importance. in all types of economies. Economic infrastructure comprises of roadways, railways, aviation, and telecommunication. Purchasing power is taken into account. The services sector provides employment to 27% of the work force. Information technology and business process outsourcing are among the fastest-growing sectors, having a cumulative growth rate of revenue 33.6% between 1997 and 1998 and 2002–03 and contributing to 25% of the country's total exports in 2007–08. The share of the Indian IT industry in the country's GDP increased from 4.8% in 2005–06 to 7% in 2008. In 2009, seven Indian firms were listed among the top 15 technology outsourcing companies in the world. The study focused towards roadways and highways. A road is a route, or way on land between two places that has been paved or otherwise improved to allow travel by foot or some form of conveyance, including a horse, cart, bicycle, or motor vehicle.

The overall objective of the study is to study the Service Sector with special reference to roadways, highways in USA and India. The specific objectives of the study are to examine the National Highway classification, to examine Indian road network, Road Classification and the Authority responsible, National Highways in India, by state and union territories, to know the Rural road network in India, trends over 10 years, to examine the Road class, injury crashes, fatalities, injury rate, fatility rate, fatalities per 1000 injury crashes, to examine Deaths per one million inhabitants, deaths per ten billion vehicle, deaths per one lakh registered vehicles, registered vehicles per one thousand inhabitants, seatbelt wearing rates, speed limit for urban, rural and motorways.

Nature and Source of Data: *The study made with the help of secondary data and information obtained through economic survey, census reports, journals, reports, periodicals and internet.*

Roadways are important component of economic infrastructure. In developed nations especially in USA well developed road network noticed. In India also good road network observed. But in rural areas improvement in road network expected. Then only it is possible to enhance development of rural areas.

Keywords: Roadways, Highway Authority, Road Network, Speed Limit, Injury Rate.

Introduction

India is fifteenth in services output. Service industry employ English-speaking Indian workers on the supply side and on the demand side, has increased demand from foreign consumers interested in India's service exports or those looking to outsource their operations. India's IT industry, despite contributing significantly to its balance of payments, accounts for only about 1% of the total GDP or 1/50th of the total services.

A **road** is a route, or way on land between two places that has been paved or otherwise improved to allow travel by foot or some form of conveyance, including a horse, cart, bicycle, or motor vehicle.

Roads consist of one or two roadways (British English: carriageways), each with one or more lanes and any associated sidewalks (British English: pavement) and road verges.

Roads that are available for use by the public may be referred to as public roads or as highways.

A highway is any public road or other public way on land. It is used for major roads, but also includes other public roads and public tracks: It is *not* an equivalent term to freeway (motorway).

The classifications of road network refer to the level of government (state, provincial, county) that maintains the roadway.
The term has led to several related derived terms, including highway system, highway code, highway patrol and highwayman.

The Organisation for Economic Co-operation and Development (OECD) defines a road as "a line of communication (travelled way) using a stabilized base other than rails or air strips open to public traffic, primarily for the use of road motor

vehicles running on their own wheels," which includes "bridges, tunnels, supporting structures, junctions, crossings, interchanges, and toll roads, but not cycle paths."

The definition of a road depends on the definition of a highway, however there is no formal definition for a highway in the relevant Act. A 1984 ruling said "the land over which a public right of way exists is known as a highway; and although most highways have been made up into roads, and most easements of way exist over footpaths, the presence or absence of a made road has nothing to do with the distinction. Another legal view is that while a highway historically included footpaths, bridleways, driftways, etc., it can now be used to mean those ways that allow the movement of motor-vehicles, and the term *rights of way* can be used to cover the wider usage.

It is clear from the secondary data and information that in urban areas roads may diverge through a city or village and be named as streets, serving a dual function as urban space easement and route. Modern roads are normally smoothed, paved, or otherwise prepared to allow easy travel. Historically many roads were simply recognizable routes without any formal construction or maintenance.

The Research Methodology

The Overall Objective of the Study is to Study the Service Sector with special reference to roadways, highways in USA and India.

The specific objectives of the study are to examine the National Highway classification,

- To examine Indian road network, Road Classification and the Authority responsible.
- To study National Highways in India, by state and union territories.
- To know the rural road network in India, trends over 10 years.
- To examine the road class, injury crashes, fatalities, injury rate, fatility rate, fatalities per 1000 injury crashes.
- To examine deaths per one million inhabitants.
- To examine deaths per ten billion vehicle, deaths per one lakh registered vehicles, registered vehicles per one thousand inhabitants, seatbelt wearing rates, speed limit for urban, rural and motorways.

Nature and Source of Data

The study made with the help of secondary data and information obtained through economic survey, census reports, journals, reports, periodicals and internet.

Results of the Study

United States

In the United States, laws distinguish between *public roads*, which are open to public use, and *private roads*, which are privately controlled.

Construction Costs

The Sample per-mile costs to construct multi-lane roads in several US northeastern states were as follows:

- Connecticut Turnpike — $3,449,000 per mile
- New Jersey Turnpike — $2,200,000 per mile
- Pennsylvania Turnpike (Delaware Extension) — $1,970,000 per mile
- Northern Indiana Toll Road — $1,790,000 per mile
- Garden State Parkway — $1,720,000 per mile
- Massachusetts Turnpike — $1,600,000 per mile
- Thruway, New York to Pennsylvania Line — $1,547,000 per mile
- Ohio Turnpike — $1,352,000 per mile
- Pennsylvania Turnpike (early construction) — $736,000 per mile

Source: The New York State Thruway Authority.

It is clear from the secondary data and information that the United States has the largest network of roads of any country with 4,050,717 miles (6,518,997 km) as of 2009. The Republic of India has the second largest road system in the world with 4,689,842 kilometres (2,914,133 mi) of road (2013). The People's Republic of China is third with 3,583,715 kilometres (2,226,817 mi) of road (2007). The Federative Republic of Brazil has the fourth largest road system in the world with 1,751,868 kilometres (1,088,560 mi) (2002). If we looking only at expressways the National Trunk Highway System (NTHS) in China has a total length of 45,000 kilometres (28,000 mi) at the end of 2006, and 60,300 km at the end of 2008, second only to the United States with 90,000 kilometres (56,000 mi) in 2005.

The classifications of road network refer to the level of government (state, provincial, county) that maintains the roadway. The term has led to several related derived terms, including highway system, Highway Code, highway patrol and highwayman.

Major highways are often named and numbered by the governments that typically develop and maintain them. Australia's Highway 1 is the longest national highway in the world at over 14,500 km or 9,000 mi and runs almost the entire way around the continent. China has the world's largest network of highways followed closely by the United States of America. Some highways, like the Pan-American Highway or the European routes, span multiple countries. Some major highway routes include ferry services, such as U.S. Route 10, which crosses Lake Michigan.

The United States has the world's largest network of highways, including both the Interstate Highway System and the U.S. Highway System. At least one of these networks is present in every state and they interconnect most major cities.
China's highway network is the second most extensive in the world, with a total length of about 3.573 Gm. China's expressway network is the longest Expressway system in the world, and it is quickly expanding, stretching some 85 Mm at the end of 2011. In 2008 alone, 6.433 Mm expressways were added to the network.

Longest International Highway
The Pan-American Highway, which connects many countries in the Americas, is nearly 25,000 kilometres (15,534 mi) long as of 2005 The Pan-American Highway is discontinuous because there is a significant gap in it in southeastern Panama, where the rainfall is immense and the terrain is entirely unsuitable for highway construction.

Longest National Highway (Circuit)
Australia's Highway 1 at over 20 Mm (12,000 mi). It runs almost the entire way around the continent's coastline. With the exception of the Federal Capital of Canberra, which is far inland, Highway 1 links all of Australia's capital cities, although Brisbane and Darwin are not directly connected, but rather are bypassed short distances away. Also, there is a ferry connection to the island state of Tasmania, and then a stretch of Highway 1 that links the major towns and cities of Tasmania, including Launceston and Hobart (this state's capital city).

Largest National Highway System
The United States of America has approximately 6.43 gigametres (3,995,417 mi) of highway within its borders as of 2008.

Busiest Highway
Highway 401 in Ontario, Canada, has volumes surpassing an average of 500,000 vehicles per day in some sections of Toronto as of 2006.

Widest Highway (maximum number of lanes)
The Katy Freeway (part of Interstate 10) in Houston, Texas, has a total of 26 lanes in some sections as of 2007. However, they are divided up into general use/ frontage roads/ HOV lanes, restricting the traverse traffic flow.

Widest Highway (maximum number of through lanes)
Interstate 5 along a two-mile-long (3.2 km) section between Interstate 805 and California State Route 56 in San Diego, California, which was completed in April 2007, is 22 lanes wide.

Highest International Highway
The Karakoram Highway, between Pakistan and China, is at an altitude of 4,693 metres (15,397 ft).

Table 1: National Highway classification:

Lanes	Length (km)	Percentage
Single Lane / Intermediate lane	18,350	26%
Double lane	36031	51%
Four Lane/Six lane/Eight Lane	16,553	23%
Total	**70,934**	**100%**

The above table gives the information about National highway classification. It is clear from the table that the double lane has recorded more in comparison with single lane/intermediate lene followed by four lane/six lane /eight lane in this chronological order.

Table 2: Some countries incorporate bus lanes onto highways

Country	Highway	Bus lanes (km)	Section
Australia	M2 Hills Motorway		Abbott Road–Beecroft Road (Sydney
Canada	Don Valley Parkway	0.458	shoulder converted as bypass lane from Lawrence Avenue East to York Mills Road
Canada	Ontario Highway 417	7	Eagleson Road–Ontario Highway 417 (Ottawa
Canada	Ontario Highway 403	6	Mavis Road–Winston Churchill Boulevard (Mississauga
Hong Kong	TuenMun Road		
South Korea	Gyeongbu Expressway	137.4	Hannam IC (Seoul) ~ Sintanjin IC (Daejeon
Netherlands	A1 motorway (Netherlands)		End of A6-Vechtbrug (Muiden

The above table gives the information about incorporate bus lanes onto highways in various countries. It is clear from the above table that the countries such as Australia, Canada, Honkong, South Korea have incorporated bus lanes onto highways.

Table 3: Indian Road Network

Class	Length (km)
Expressways	1,000 km (620 mi)
Total national highways	92,851.05 km (57,694.97 mi)
National highways (already 4/6 laned)	22,900 km (14,200 mi)
National highways (being 4/6 laned)	25,000 km (16,000 mi)
State highways	154,522 km (96,016 mi)
Major and other district roads	2,577,396 km (1,601,520 mi)
Rural & other roads	1,433,577 km (890,783 mi)
Total (approx)	**4,245,429 km (2,637,987 mi)**

The above table gives the information about Indian road network. It is clear from the table that major and other district roads are having more kilometers in comparison with rural and other roads followed by State highways, total national highways, national highways (being 4/6 laned), national highways (already 4/6 laned and expressways in this chronological order.

Table 4: Road Classification and the Authority responsible

Road classification	Authority responsible	Total kilometres (as of 2011)
National Highways	Ministry of Road Transport & Highways (Central government)	92,851
State Highways	State governments (state's public works department) department)	1,63,898
Major and other district roads	Local governments, panchayats and municipalities	17,05,706
Rural roads	Local governments, panchayats and municipalities	27,49,805

The above table gives the information about classification of roads and the authority responsible. It is clear from the table that the total kilometers of rural roads have recorded more in comparison with major and other district roads followed by state highways and national highways in this chronological order.

Table 5: National Highways in India, by state and union territories

State / Union Territory	National Highway Length, kilometres	Kilometers per 1000 people	National Highway Numbers
Andaman and Nicobar Islands	300	0.843	223
Islands			
Andhra Pradesh	4,537	0.06	4, 5, 7, 9, 16, 18, 18A, 43, 63, 202, 205, 214, 214A, 219, 221, 222 & 234

Arunachal Pradesh	1,992	1.816	52, 52A, 153, 229, 52B Ext. & 37 Ext.
Assam	2,836	0.106	31, 31B, 31C, 36, 37, 37A, 38, 39, 44, 51, 52, 52A, 52B, 53, 54, 61, 62,151,152,153 &154
Bihar	3,642	0.044	2, 2C, 19, 28, 28A, 28B, 30, 30A, 31, 57, 57A, 77, 80, 81, 82, 83, 84, 85, 98, 99, 101, 102, 103, 104, 105, 106, 107 & 110
Chandigarh	24	0.027	21
Chhattisgarh	2,184	0.105	6, 12A, 16, 43, 78, 200,202, 216, 217, 111, & 221
Dadra and Nagar Haveli	0	0	
Daman and Diu	0	0	
Delhi	72	0.005	1, 2, 8, 10 & 24
Goa	269	0.2	4A, 17, 17A & 17B
Gujarat	3,245	0.064	NE-I, 6, 8, 8A, 8B, 8C, 8D, 8E, 14, 15, 59, 113 & 228
Haryana	1,512	0.072	1, 2, 8, 10, 21A, 22, 64, 65, 71, 71A, 72, 73, 73A, 71B & NE-II
Himachal Pradesh	1,409	0.232	1A, 20, 20A, 21, 21A, 22, 70, 72, 72B, 88 & 73A
Jammu & Kashmir	1,245	0.123	1A, 1B, 1C & 1D
Jharkhand	1,805	0.067	2, 6, 23, 31, 32, 33, 75, 78, 80, 98, 99 & 100
Karnataka	4,396	0.083	4, 4A, 7, 9, 13, 17, 48, 63, 67, 206, 207,209, 212, 218 & 234
Kerala	1,457	0.046	17, 47, 47A, 47C, 49, 208, 212, 213, & 220
Lakshadweep	0	0	
Madhya Pradesh	4,670	0.077	3, 7, 12, 12A, 25, 26, 26A, 27, 59, 59A, 69, 75, 76, 78, 86 & 92
Maharashtra	4,176	0.043	3, 4, 4B, 4C, 6, 7, 8, 9, 13, 16, 17, 50, 69, 204,
Manipur	959	0.418	39, 53, 150 & 155
Meghalaya	810	0.349	40, 44, 51 & 62
Mizoram	927	1.044	44A, 54, 54A, 54B, 150 & 154
Nagaland	494	0.248	36, 39, 61, 150 & 155
Orissa	3,704	0.101	5, 5A, 6, 23, 42, 43, 60, 75, 200, 201, 203, 203A, 215, 217 & 224
Puducherry	53	0.054	45A & 66
Punjab	1,557	0.064	1, 1A, 10, 15, 20, 21, 22, 64, 70, 71, 72 & 95
Rajasthan	5,585	0.099	3, 8, 11, 11A, 11B, 11C, 12, 14, 15, 65, 71B, 76, 79, 79A, 89, 90, 113, 112, 114, 116, 148D, 458, 758 & 58
Sikkim	62	0.115	31A
Tamil Nadu	4,832	0.077	4, 5, 7, 7A, 45, 45A, 45B, 45C, 46,

			47, 47B, 49, 66, 67, 68, 205, 207, 208, 209, 210, 219, 220, 226, 226E, 227, 230 & 234
Tripura	400	0.125	44 & 44A
Uttarakhand	2,042	0.241	58, 72, 72A, 72B,73, 74, 87, 94, 108, 109, 123, 119, 121, 87 Ext. & 125
Uttar Pradesh	6,774	0.041	2, 2A, 3, 7, 11, 12A, 19, 24, 24A, 24B, 25, 25A, 26, 27, 28, 28B, 28C, 29, 56, 56A, 56B, 58, 72A, 73, 74, 75, 76, 86, 87, 91, 91A, 92, 93, 96, 97, 119, 231, 232, 232A 233, 235 & NE-II
West Bengal	2,578	0.032	2, 2B, 2B Ext., 6, 31, 31A, 31C, 31D. 32, 34, 35, 41, 55, 60, 60A, 80, 81 & 117
India	70,548	0.069	

The above table gives the information about the National highways in India, by State and Union Territories. It is clear from the table that Uttar Pradesh is having more length of highway kilometers followed by Rajastan, Tamil Nadu, Madhya Pradesh, Andhra Pradesh, Karnataka, Orissa, Bihar, Assam, West Bengal, Chattisgarh, Uttarakhand, Arunachal Pradesh,Haryana,Kerala,HimachalPradesh,Manipura,Mizoram,Nagaland, Tripura, Andaman and Nicobar Islands, Goa, Delhi, Sikkim, Puducherry and Chandigarh in this chronological order.

The main highways running through the length and breadth of the country connecting major ports, state capitals, large industrial and tourist centres, etc. National Highways in India are designated as NH followed by the highway number. Indian national highways are further classified based on the width of carriageway of the highway. As of March 2012, India had completed and placed in use the following newly built highways:

- 5,846 kilometers of its 4-lane Golden Quadrilateral highway,
- 6,310 kilometres of its 4-lane North–South and East–West Corridor highway,
- 353 kilometres of 4-lane port connectivity highways,
- 4,553 kilometres of 4-lane inter-capital highways,
- 961 kilometres of 4-lane bypass and other national highways.

Table 6: Rural road network in India, trends over 10 years

	Kilometers in 2001	**Kilometers as of May 2011**	**Kilometers under construction in 2011**
Total rural roads	2.7 million	3.1 million	0.1 million
Paved, not maintained rural roads	0.5 million		
Unpaved rural roads	2.2 million	1.9 million	
Paved, maintained rural roads		728,871	53,634
New rural roads		322,900	82,743

The above table gives the information about the rural road network in India, trends over ten years.

Table 7: Indian Road Network

Class	**Length (km)**
Expressways	2,000 km (1,200 mi)
Total National Highways	92,851.05 km (57,694.97 mi)

National Highways (Already 4/6 laned)	22,900 km (14,200 mi)
National Highways which are being 4 or 6 laned (India)	25,000 km (16,000 mi)
State Highways	154,522 km (96,016 mi)
Major and other district roads	2,577,396 km (1,601,520 mi)
Rural & other roads	2,650,577 km (1,646,992 mi)
Total (approx)	**4,245,429 km (2,637,987 mi)**

The above table gives the information about the Indian road network. It is clear from the table that rural and other roads are having more kilometers followed by major and other district roads, State highways, total national highways, national highways which are being 4 or 6 laned, national highways (already 4/6 laned), expressways in this chronological order.

Table 8
The Road class, injury crashes, fatalities, injury rate, fatility rate, fatalities per 1000 injury crashes.

A 2012 report prepared by the World Bank's Institutional Integrity Unit alleged that fraudulent and corrupt practices were being followed by Indian contractors working on national highway projects funded by it, and sought a thorough investigation into the matter. The report also alleged that contractors paid bribes and gifts, including gold coins, to "influence the actions" of officials and consultants of the National Highways Authority of India.

Road Class	Injury Crashes	Fatalities	Injury Rate	Fatality Rate	Fatalities per 1000 Injury Crashes
Autobahn	18,452	428	82	1.9	23.2
Rural	73,003	1,934	249	6.6	26.5
Urban	199,650	199,650	958	4.7	4.9
Total, Average	291,105	3,399	401	4.6	11.6

The above table gives the information about the road cass, injury crashes, fatalities, injury rate, fatility rate, fatalities per 1000 injury crashes. It is clear from the table that the injury crashes and fatalities have recorded more in urban area followed by rural and autobahn road class in this chronological order. Injury rate recorded more in urban areas followed by rural and autobaln, fatality rate more in rural areas followed by urban and autobahn , fatalities per 1000 injury crashes recorded more in rural areas followed by autobahn and urban areas in this sequence.

Table 9
Deaths per one million inhabitants, deaths per ten billion vehicle, deaths per one lakh registered vehicles, registered vehicles per one thousand inhabitants, seatbelt wearing rates, speed limit for urban, rural and motorways.

Country	Deaths per 1 million inhabitants	Deaths per 10 billion vehicle-km	Deaths per 100 000 registered vehicle	Registered vehicles per 1 000 inhabitants	Seatbelt wearing rates Front (driver, passenger)/ Rear (adults, children)	speed limit urban / rural / motorways (km/h)
Argentina	123	*n.a.*	23	529	52%,45% / 19%,45%	30-60 / 110 / 130
Australia	51	50	7	751	97% / 96%	50, 60-80 / 100 or 110 / 110
Austria	54	58	8	710	89% / 77%	50 / 100 / 130
Belgium	65	71	10	627	86% / 63%,79%	30-50 / 70-90 / 120
Cambodia	143	*n.a.*	*n.a.*	78	151	17% / *n.a.*
Canada	55	56	9	644	95% / 95% (estimated)	40-70 / 80-90 / 100-110

Chile	120	*n.a.*	50	237	62,78% / 15%	60 / 100-120 / 120
Czech Republic	62	157	11	560	97% / 66%	50 / 90 / 130
Denmark	34	39	6	523	94% / 81%	50 / 80 / 130 (110)
Finland	48	48	7	725	95% / 87%	50 / 80 (winter) 100 (summer) / 120 (100)
France	51	58	8	647	98% / 84%,90%	50 / 90 / 130
Germany	41	46	6	651	96-98% / 97,98%	50 / 100 / no limit or 130
Greece	79	*n.a*	11	726	77%,74% / 23%	50 / 90 (110) / 130 (110)
Hungary	60	*n.a.*	16	366	87% / 57%,90%	50 / 90 / 130 (110)
Iceland	47	47	6	830	84% / 65%	50 / 90 (80) / *n.a.*
Ireland	41	40	8	541	92% / 88%,91%	50 / 80 or 100 / 120
Israel	34	54	9	352	97% / 74%	50,70 / 80,90,100 / 110
Italy	57	*n.a*	7	821	64%-76% / 10%	50 / 90-110 / 130 (110 bad w., 100 novice, 150)
Jamaica	122	*n.a*	87	130	44% / *very low* (estimated)	50 / 50 / 70 or 110
Japan	40	69	6	657	96%,94% / 61%	40,50,60 / 50,60 / 100
Korea	101	172	23	450	89%,75% / 22% (on	60 / 60-80 / 110 (100)
Lithuania	87	*n.a*	11	766	95% / 33%	50 / 90 (70) / 120 or 130 (110 in winter)
Luxembourg	84	*n.a*	11	771	80% / *n.a.*	50 / 90 / 130 (110 in rain)
Malaysia	231	122	29	792	82%,68% / 9%	50 / 90 / 110
Morocco	116	*n.a*	117	100	49%,46% / *n.a*	50 / 100 / 120
Netherlands	34	45	5	537	97% / 82%	50 / 80 / 130
New Zealand	57	63	8	734	97% / 92%,93%	50 / 100 / 100
Norway	37	43	5	707	95% / 87-88%	30,50 / 80 / 90,100,110
Poland	87	n.a	14	636	90% / 71%,89%	50 (60) / 90-120 / 140
Portugal	61	n.a	11	551	96% / 77%,89-100%	50 / 90 (110) / 130
Serbia	36	n.a	30	299	70% / 4%	50 / 80 / 120
Slovenia	61	72	10	638	94% / 66%,87-94%	50 / 90 (110) / 130
Spain	36	*n.a*	5	662	90% / 81%	50 / 90 or 100 / 120
Sweden	27	34	5	597	97% / 81%,95%	30,40,50 /60,70,80,90,100 / 110 or 120

Switzerland	33	43	5	708	94%,93% / 77%,93%	50 / 80 / 120
United Kingdom	28	35	5	551	96% / 92%	48 / 96 or 113 / 113
United States	103	68	12	852	87% / 74%	set by state / set by state / 88-129 (set by state)

The above table gives the information about the deaths per one million inhabitants, deaths per ten billion vehicle, deaths per one lakh registered vehicles, registered vehicles per one thousand inhabitants, seatbelt wearing rates, speed limit for urban, rural and motorways. It is clear from the above table that deaths per one billon inhabitants are more in Malaysia followed by Cambodia, Argentina, Jamaica, Morocco, United States, Korea, Poland, Lithuania, Luxembourg, Greece, Belgium, Czech Republic, Portugal, Slovenia, Portugal, Italy, Canada, Austria, France, Australia, Finland, Iceland, Germany, Ireland, Japan, Norway, Serbia, Spain, Netherlands, Israel, Denmark, United Kingdom and Sweden in this chronological order.

List of state Highways in Karnataka

The state highways are arterial routes of a state, linking district headquarters and important towns within the state and connecting them with national highways or highways of the neighboring states.

Karnataka has a good road network. There are 14 national highways and 114 state highways with total length of 28,311 km.

Conclusion

Roadways are important component of economic infrastructure. In developed nations especially in USA well developed road network noticed. In India also good road network observed. But in rural areas improvement in road network expected. Then only it is possible to enhance development of rural areas.

Suggestion

In developed nations especially in USA Government should take proper initiation to control road accidents. In India Central and State Governments should give much attention to improve the quality of roads that too in rural areas and Government should take effective measures to reduce road accidents and should provide adequate safety measures to avoid accidents.

References

1. "Road Infrastructure Strategic Framework for South Africa". A Discussion Document. National Department of Transport (South Africa).Retrieved 2007-03-24.
2. Lendering, Jona. "Royal Road". History of Iran. Iran Chamber of Society. Retrieved 2007-04-09.
3. "World resssport on road traffic injury prevention". World Health Organisation. Retrieved 14 April 2010.
4. Graham-Harrison, Emma (16 November 2007). "China says needs extra million km of roads by 2020". Reuters.
5. "China Road Construction Report, 2007–2008". Okokok.com.cn. 22 December 2008. Retrieved 12 January 2013.
6. "Indian Road network". National Highways Authority of India (NHAI).Retrieved 15 June 2011.
7. "NHDP programme". National Highways Authority of India (NHAI).Retrieved 15 June 2011.
8. Lovegrove G., Sayed T. (2006). "Macro-level collision models for evaluating neighbourhood traffic safety". Canadian Journal of Civil Engineering 33: 609–621. doi:10.1139/l06-013.
9. "The Good, the Bad and the Talented: Young Drivers' Perspectives on Good Driving and Learning to Drive" (PDF). Road Safety Research Report No. 74. Transport Research Laboratory. January 2007. Retrieved 4 January 2008.
10. Central Intelligence Agency."Transportation: Roadways". CIA World Factbook.