

In the 1960s, the auto industry focused on making safer vehicles. In 1964, Studebaker-Packard was the first company to introduce seat belts as standard equipment on all of its vehicles. In addition to safety, car buyers of this era expected vehicles to be powerful and spacious, and fuel economy was not a major concern.

During this decade Sport Utility Vehicles (SUV) became incredibly popular. Stable gas prices in from the 1980s led consumers to worry less about the use of resources for these larger, four-wheel-drive vehicles. While customers weren't overly concerned with environmental concerns, governments were. In the late 1990s the first hybrid cars were manufactured with both a small gas engine and an electric motor.

By 2005, 80 percent of global production came from 11 countries, representing a widening of the playing field and a significant growth in global competition. During the first few years of the new millennium, car companies catered to consumers who expected powerful vehicles. The sport utility vehicle (SUV) was king, and it was easy for consumers to obtain credit to purchase one of these expensive automobiles.

The modern automotive industry is huge. In the United States it is the largest single manufacturing enterprise in terms of total value of products, value added by manufacture, and number of wage earners employed. One of every six American businesses is dependent on the manufacture, distribution, servicing, or use of motor vehicles; sales and receipts of automotive firms represent more than one-fifth of the country's wholesale business and more than one-fourth of its retail trade. For other countries these proportions are somewhat smaller, but Japan, South Korea, and the countries of western Europe have been rapidly approaching the level in the United States.

Since 2010 the auto industry has been recovering from its past losses after a major economic downturn quickly. The industry saw its best year since 2007 in 2013 with more sales and jobs each year. Drivers now have more options on types of vehicles and add-on luxuries than ever before. Fuel-efficient and sustainable automobiles are popular, and self-directed vehicles and those with internet connected services are rising in popularity. You can expect to see exponential growth in the global market for high-tech vehicle components in the coming years.

References

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ROAD TRAFFIC ACCIDENTS AND WAYS TO PREVENT THEM

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Every year the lives of approximately 1.3 million people are cut short as a result of road traffic crashes. Between 20 and 50 million more people suffer non-fatal injuries, with many incurring a disability as a result of their injuries. Road traffic

injuries cause considerable economic losses to individuals, their families, and to nations as a whole. These losses arise from the cost of treatment as well as lost productivity for those killed or disabled by their injuries, and for family members who need to take time off work or school to care for the injured. Road traffic crashes cost most countries 3% of their gross domestic product.

The young are particularly vulnerable on the world's roads and road traffic injuries are the leading cause of death for children and young adults aged 5–29. Young males under 25 years are more likely to be involved in road traffic crashes than females, with 73% of all road traffic deaths occurring among young males in that age [1]. As authorities report a higher proportion of vulnerable road users die in low-income countries than in high-income countries [2].

Road accidents have been a major cause for concern across the Indian subcontinent. In 2019 alone, the country reported over 151 thousand fatalities due to road accidents. Each year, about three to five percent of the country's GDP was invested in road accidents [3].

In Ukraine, according to official statistics, traffic collisions with fatalities occur fifth times more than in Europe. Every year because of car crashes die more than 3000 humans and more 300 000 result in injuries, \$5 mill is lost. The highest burden of injuries and fatalities is borne disproportionately by poor people, as they are mostly pedestrians and passengers of buses and minibuses.

According to mass media, every day on Ukrainian roads nearly 500 road accidents occurred by which people are injured. From beginning of 2021 in the country 29 545 accidents happened, that on 19,5% higher, than by a year before. From them 3696 injured and 415 persons perished. In Kharkiv

1974 road accidents happened, that on 7.2% higher than in the previous year. Despite of that, the number of injuries and deaths have reduced on 35.6% and 14.8% accordingly that counts 203 injured and 177 perished. In the majority, accidents arise up through drivers' violation of traffic codes, prohibitive signal of traffic-light, reckless driving (aggressive manoeuvring and passing) [4].

Therefore countries and international communities are paying increasing attention to road safety policy in order to provide road traffic safety, that include actions to inform and guide the building of a safe road system to prevent crashes, and if crashes occur, to ensure that impact forces are not sufficient to result in serious accidents (injury or death), that those injured are rescued and that they receive adequate trauma care.

Road deaths and injuries are preventable. A wide range of effective road safety interventions exist. One of them is the Save LIVES technical package has been developed by World Health Organization (WHO) to support road safety decision-makers and practitioners in their efforts to decrease significantly the number of road traffic deaths in their countries. A technical package is defined as a selected group of related interventions that, together, will achieve and sustain substantial and sometimes synergistic improvements in a specific risk factor or disease outcome. A technical package distils a broad set of potential interventions into a manageable and

limited high-value set, thereby providing policymakers with specific interventions known to be effective.

“Save LIVES“ provides an evidence-based inventory of priority interventions for road safety decision-makers and practitioners. The momentum generated by those targets challenges countries to create safer roads and scale up the implementation of priority interventions around the world in order to halve deaths and injuries caused by road traffic crashes, as well as to improve road safety through access to safe, affordable, accessible and sustainable transport systems for all by 2030.

If the problem of road safety is effectively addressed, the gains resulting from the reduction in costs, both in economic and human terms, can be channeled, for example, into development projects and other areas of concern. If no significant action is taken, however, road traffic fatalities are predicted to become the seventh leading contributor to the global burden of disease by 2030 [1].

To draw attention of world society to road traffic victims the World Day of Remembrance for Road Traffic Victims (WDoR) was founded by RoadPeace in 1993. In 2005, the United Nations endorsed it as a global day to be observed every third Sunday in November each year, as the “appropriate acknowledgement for victims of road traffic injuries and their families”. Since then the World Day of Remembrance has been observed and promoted worldwide by many governments, international agencies and groups [5].

References

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DRY SHRINKAGE PROPERTIES OF CEMENT STABILIZED MACADAM

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Cement stabilized macadam (CSM) as a semi-rigid base mix has been widely used in the construction of high-grade highway base, which has the advantages of high strength, stability, anti-scouring ability and low engineering cost. At the same time, it also has its own defects: the pavement paved with semi-rigid base mixes such as CSM will have cracks in the surface layer one after another after several years or even months of use. The main causes of semi-rigid base material cracking make the vehicle load and the dry shrinkage and temperature shrinkage of CSM. Among them, the drying shrinkage of CSM has the greatest effect on the shrinkage cracks in semi-rigid sub-grade [1,2].