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Emergency or Preparedness Handling and Analysis in Elevated Toll Roads

[1]Mr. Dhananjaya Kumar K, [2]Mr. Ramesh Sundararamara

[1]Internee, Post Graduate, [2]Professor, International Institute of Information Technology- Bangalore

Abstract: **A huge number of roads in Indian country, the road is nothing but not a simple or highway roads, the project goes to handle emergency to save the people life and vehicle in on any roads(Free way, Elevated toll way, Express way, Flyover, National Highway or more..) by giving service provider through patrol service in particular toll Service provider, Ambulance services in ambulance service provider and Hospital Services in nearest hospitals and also main concentration about avoiding accident and traffic in roads. For example to take elevated toll road Electronic city flyover how to handle emergency suppose an accident or vehicle breakdown, in this project citizen having emergency on any toll roads and they come out to the original solution. But look out the citizen and authority wants to help to someone to someone to take care about them self when problem accurse in road. The project next to detailed about survey, service handling, traffic avoidance and avoid accident. The project helps out mainly citizen to save life and live long time to take service through on road. Our service extends from providing mechanic shop address,** Local Garage **detail near you, car fix service, car maintenance & servicing deals at the Local garages in your city. We are a breakdown cover company where you get complete solution for any emergency vehicle breakdowns no matter whatever the vehicle you are driving we will send a local mechanic to fix your car faults and service extends from providing accidental service are ambulance service, Hospital service and also traffic update while during driving.**

"Start late, reach early; reduce driving fatigue, wear and tear, save fuel cost and the environment!"

Keywords: **Ambulance Service Provider, Road Assistance Provider, Traffic Controller.**

I. INTRODUCTION

A. Elevated Toll Road:

A toll road, also known as a Elevated toll way, is a public or private roadway for which a fee is assessed for passage. Elevated Toll roads in some form have existed since antiquity, collecting their fees from passing travellers on foot, wagon or horseback; but their prominence increased with the rise of the vehicle, and many modern toll ways charge fees for motor vehicles exclusively. The amount of the toll usually varies by vehicle type, weight, or number of axle, with freight trucks often charged higher rates than cars.

Tolls are collected at points known as toll booths, toll houses, plazas, stations, bars, or gates. Some toll collection points are unmanned and the user deposits money in a machine which opens the gate once the correct toll has been paid. To cut costs and minimize time delay many tolls today are collected by some form of automatic or elevated toll road (figure a) equipment which communicates electronically with a toll payer's transporter. Toll booths are usually still required for the occasional users who do not have a transponder. The tolls are often prepaid or collected "automatically" from an affiliated credit card service. Some toll roads have "automated" toll enforcement systems that take photos of drivers who do not pay the tolls and their license plates. They typically get the toll bill along with a fine.

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a. Toll collection area in the Electronic city.

b. Elevated toll road access.

B. Emergency Preparedness:

"Emergency Preparedness is the discipline of dealing with and avoiding both natural and manmade disasters. It involves mitigation, preparedness, response and recovery in order to lessen the impact of disasters. Emergency management requires a partnership among all levels of government (local, State, and Federal) and the private sector (business and industry, voluntary organizations, and the public). Successful preparedness requires detailed planning and cooperation among each sector. Emergency preparedness ranges from the Federal Emergency Management Agency (FEMA) developing an all inclusive plan to mitigate natural disasters to the individual ensuring their car has plenty of fuel for a possible evacuation.

The following principles illustrate the emergency preparedness concept. Emergency preparedness at all levels considers and takes into accident and all hazards, all phases, all citizen and all impacts relevant to disasters. Anticipation of future disasters and preventive and preparatory measures build disaster-resistant and disaster-resilient communities. Sound risk management principles (hazard identification, risk analysis, and impact analysis) are used in assigning priorities and resources. Unity of effort among all levels of government and all elements of a community are integrated. Broad and sincere relationships among individuals and organizations are incorporated to encourage trust, advocate a team atmosphere, build consensus, and facilitate communication. Activities of all relevant stakeholders are synchronized to achieve a common purpose. Creative and innovative approaches are used to overcome disaster challenges. Emergency preparedness uses a science and knowledge-based approach; based on education, training, experience, ethical practice, public stewardship and continuous improvement. Management consists of four phases: Mitigation, Preparedness, Response, and recovery.

Mitigation: Mitigation is the ability to limit death and economic damages by lessening the impact of disasters. The mitigation phase primarily focuses on preventing future emergencies or minimizing potential effects by reducing the probability an emergency will take place or reducing the effects of unavoidable disasters.. Mitigation can place before and after an emergency happens. Effective mitigation requires a sound understanding of risk management.

Preparedness: Preparedness is the state of being ready for action during a disaster or emergency. The preparedness phase is achieved and maintained through a continuous cycle of planning, organizing, training, equipping, exercising, evaluating and taking corrective action (The Preparedness Cycle). Evacuation plans and emergency shelters are examples of preparedness plans. Preparedness takes place before a disaster takes place.

Response: Response consists of actions taken to prevent death and further damage during an emergency situation. The response phase is putting the preparedness phase into action. Examples of response include evacuating a disaster area, seeking shelter, etc. Response activities take place during an emergency.

Recovery: Recovery is the ability to return to a state of normal function with minimal suffering and disruption of services following a disaster. Disaster and financial assistance are examples of recovery that aids individuals and communities. Recovery assistance can be provided at local, state, federal, or private sector levels. The recovery phase takes place following a disaster.

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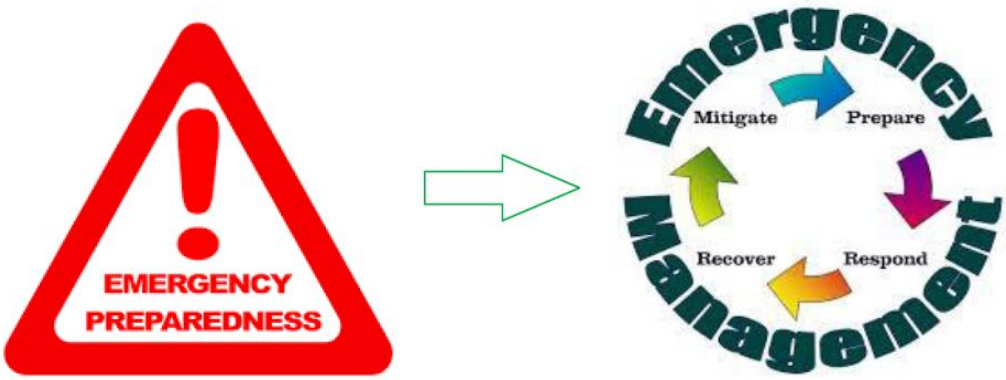


c. A plan for solving Emergency Preparedness

C. Road side Assistance Service:

a. Vehicle Service Assistance:

Roadside vehicle assistance and breakdown coverage are services that assist motorists, car, truck, whose vehicles have suffered a mechanical failure that leaves the operator stranded.

b. Ambulance Service:

Advanced life support by ambulance service is the transportation by ground **ambulance** vehicle and the provision of medically necessary supplies and **services** including and a specially equipped motor vehicle, airplane, ship, etc, for carrying injured people, usually to a hospital.

c. Hospital Service:

The Hospital offers 24 hour ambulance services. The ambulance is equipped with surgical stretchers, oxygen and crash tray with a doctor and nurse accompanying the patient. There is a large network of public hospitals and nursing posts spread across the State to provide accessible health care to all communities. There are also hospital support services and palliative care facilities.

II. LITARATURE SURVEY

1. Indian cross road proposed "Roadside Assistance (RSA) is a professional service offering that assures timely help by qualified automobile mechanics reaching out to motorists in case of a vehicle breakdown on road, anywhere. It accords an unparalleled peace of mind and assures motorists of not having to struggle to find help or being stranded on the road. Crossroads is a leading Indian RSA company with the largest service network and own infrastructure. A consistent performance record over last 16 years spells quality, safety & peace of mind for our rapidly expanding user base which includes leading corporate and individual customers [1]".

2. Bangalore Elevated toll way is one of the leading service provided by the citizen and it's specially purpose vehicle formed by the consortium has built for the Elevated Toll way. They maintain Schemes and Rates of the Toll road and maintain the accident report and giving patrol service and also provide the vehicle passes and renew passes. It is one of the national highways of authority [2].

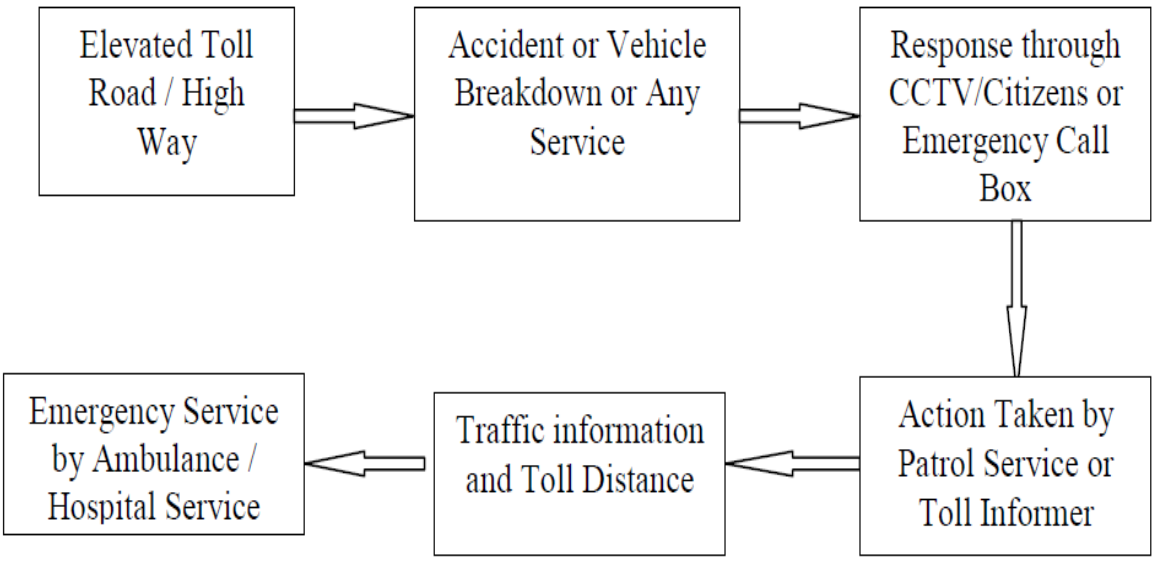
3. International Financial corporate speak about "The Environmental, Health, and Safety (EHS) Guidelines are technical reference documents with general and industry-specific examples of Good International Industry Practice (GIIP). When one or more members of the World Bank Group are involved in a project, these EHS Guidelines are applied as required by their respective policies and standards. These industry sector EHS guidelines are designed to be used together with the General EHS Guidelines document, which provides guidance to users on common EHS issues potentially applicable to all industry sectors. For complex projects, use of multiple industry-sector guidelines may be necessary. A complete list of industry-sector guidelines can be found at the EHS Guidelines contain the performance levels and measures that are generally considered to be achievable in new projects / facilities by existing technology at reasonable costs. Application of

the EHS Guidelines to existing facilities may involve the establishment of site-specific targets, with an appropriate timetable for achieving them. The applicability of the EHS Guidelines should be tailored to the hazards and risks established for each project on the basis of the results of an environmental assessment in which site-specific variables, such as host country context, assimilative capacity of the environment. And other project factors are taken into account. The applicability of specific technical recommendations should be based on the professional opinion of qualified and experienced persons. When host country regulations differ from the levels and measures presented in the EHS Guidelines, projects are expected to achieve whichever is more stringent. If less stringent levels or measures than those provided in these EHS Guidelines are appropriate, in view of specific project circumstances, a full and detailed justification for any proposed alternatives is needed as part of the site-specific environmental assessment. This justification should demonstrate that the choice for any alternate performance levels is protective of human health and the environment [3].

4. Veera Venkatesh, Nazneen Syed proposed "Traffic congestion is a major problem in cities of developing Countries like India. Growth in urban population and the middle-class segment consume vehicles to the rising number of vehicles in the cities. Congestion on roads eventually results in slow moving traffic, which increases the time of travel, thus be notable as one of the major issues in metropolitan cities. Emergency vehicles like ambulance and fire trucks need to reach their destinations at the earliest. If they spend a lot of time in traffic jams, valued lives of many people may be in danger. Here the image sequences from a camera are analyzed using various edge detection and object counting methods to obtain the most efficient technique. Then, the number of vehicles at the intersection is evaluated and traffic is efficiently managed. The traffic signal indication continuously glows to green as long as the emergency vehicle is waiting at the traffic lane. After the vehicle crossed the junction, automatically the traffic signals follow the previous pattern generation of traffic signals. This can be implemented in LABVIEW" [4].

III. METHODOLOGY

The Emergency Service providing in Elevated toll road, basically a choose from particular way and driving and comparatively choose cost of the roads, Easy direction to reach safely, Way direction, provide necessary road service to citizen. First, chose one of the particular high ways and start the travel by that road in a particular access. Where such provider when damage vehicle or breakdown or get an accident to take response within the minutes.

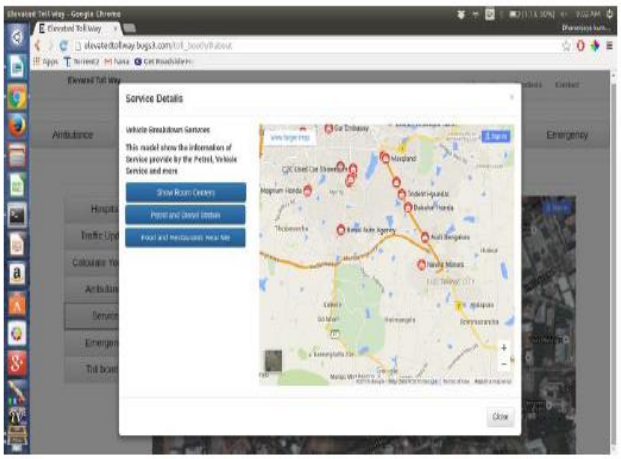


d. Methodology of Emergency Services on Elevated Toll Road.

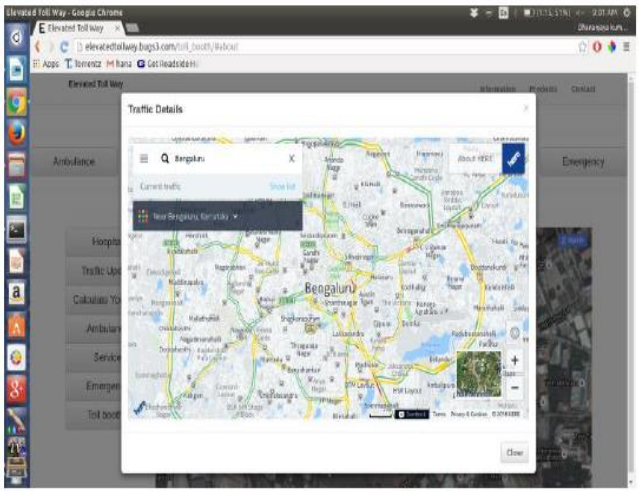
The Emergency handling in a particular service provider where the service areas, vehicle stations, and fuel station. And vehicle accident which informs through directly patrol services, toll service and more damaging or very critical accident will inform through an ambulance and Hospital through Radio call or Emergency Call box or Circuit closer television. And see the information available in the Web page, web page include all information about traffic, distance calculation, Service provider and also Report of Emergency handling and analysis.

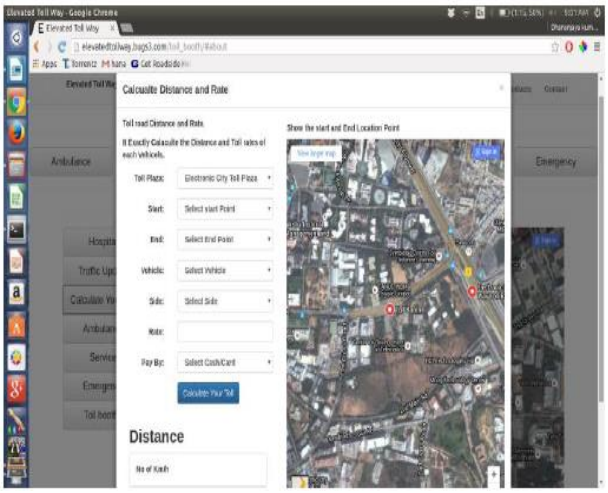
IV. RESULTS AND DISCUSSIONS

The Emergency or Prepare-dance handling design and Execute in Bootstrap web technology and java script technology. Every road as emergency easily taking the service by citizen and toll informer and also see the snap and realize the service handling process.

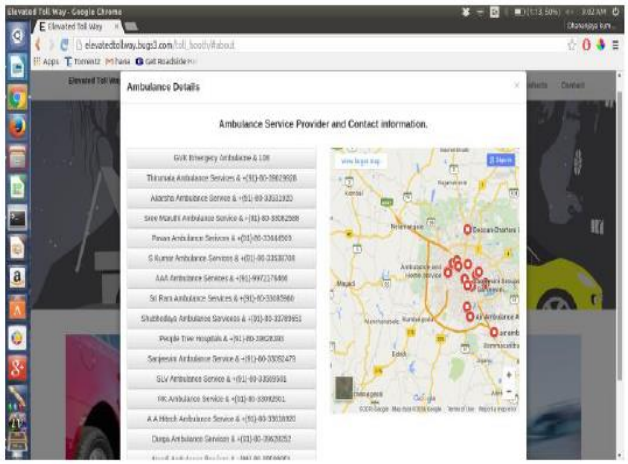


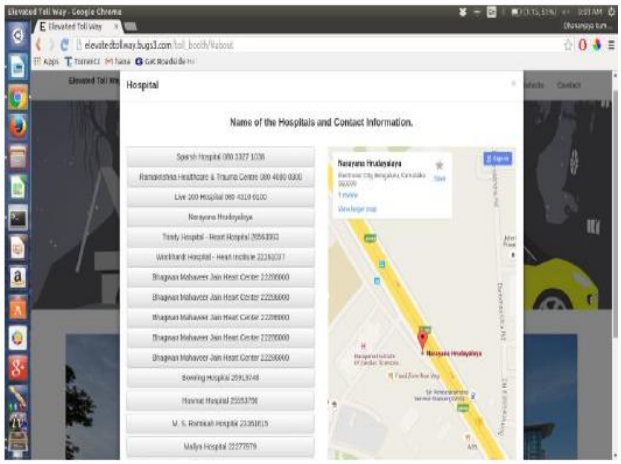
e. Vehicle Breakdown Emergency Road side Assistance and Service.





f. Traffic Detail, Toll Road Distance and Toll rate calculation





g. Ambulance and Hospital Service Provider.

V. CONCLUSION AND FUTURE WORK

Conclusion:

The Emergency on Road service is one of the main concern about save the citizen life by an accident and give the suggestion about Road access means Easy Direction, Traffic information, and Easy service when vehicle Breakdown, Accident with the help of Patrol Services, Ambulance Service Provider and Hospital Management. The Road service provides a free service and safety services for all certain time by winter, monsoon season. And also assist traffic.

Future Work:

The Emergency on Road service future work wills handle and analysing all equivalent requirements. Future Main one is Vehicle Insurance and Policy analysis, toll analysis, Vehicle analysis in all freeways, Breakdown analysis and Handling, Accident handling and analysis, service provider analysis and also mainly traffic analysis and finally time analysis using Hadoop.

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AUTHORS PROFILE

Mr. DHANANJAYA KUMAR K, I had complete Post Graduation in Computer Science and Engineering and working as internee from International institute of Information Technology, Bangalore.

Mr. RAMESH SUNDARARAMARA, He is complete MBA Post Graduation and He had more than 20 year experience in IT sector and more than 15 years Teaching Experience. Now he is working as a Professor in International Institute of Information Technology, Bangalore.