**Report on** 

# National Level one day Workshop on

# **ROAD SAFETY AUDIT**

September 30, 2016 (Fri)



Sponsored by INSTITUION OF ENGINEERS (INDIA)



Under the aegis of

DEPARTMENT OF CIVIL ENGINEERING SRI VENKATESWARA COLLEGE OF ENGINEERING

Pennalur – Sriperumbudur – 602 117

(www.svce.ac.in)

# Report on National Level Workshop on Road Safety Audit

Identification				
Workshop Title	: National Level Workshop on Road Safety Audit			
Workshop Date	: 30 <sup>th</sup> September 2016 (Fri)			
Workshop location	: Sri Venkateswara College of Engineering, Sriperumbudur -			
602 117				
Name & contact information of the person completing the report				
	: Dr.M.Selvakumar, Associate Professor, Department of Civil			
Engineering, Sri Venkateswara College of Engineering, Sriperumbudur – 602 117.				
Primary e-mail	: <u>msk@svce.ac.in</u>			
Primary contact no.	: +91 – 95660 66024			
Date of Report submission	: 11 <sup>th</sup> November 2016 (Fri)			

# Sri Venkateswara College of Engineering, Sriperumbudur

Sri Venkateswara College of Engineering (S.V.C.E.), is one of the premier technical institutions in Tamil Nadu, was established in the year 1985 and is run by Venkateswara Educational and Health Trust. The college is situated on the Chennai – Bangalore National Highway (NH – 4) about 37 kms South-West of Chennai. The National Board of Accreditation accredited many of the eligible programmes and SVCE is an **ISO 9001:2008** certified institution. In May 2016, SVCE is recognized as an autonomous institute by UGC and Anna University.

# **Department of Civil Engineering**

The department of Civil Engineering has started functioning from the year 2008, offering B.E. degree programme in Civil Engineering with the sanctioned intake of 60. The department has 10 faculty members with P.G. specialization and 4 doctorates in different domains of Civil Engineering. Department is headed by *Prof.E.Ravindranath,* who is a retired scientist from Central Leather Research Institute – Adayar.

## **Programme Introduction**

The problem of accident is very acute in highway transportation, due to complex flow pattern of vehicular traffic and presence of mixed traffic along with pedestrians. Traffic accidents lead to loss of life and property. Thus the traffic engineers have to undertake a bigger responsibility of providing safe traffic movements to the road users and ensure their safety. Road accidents cannot be completely prevented but, by suitable traffic engineering and management the accident rate can be reduced to a certain extent. For this reason systematic study of traffic accidents is necessary. Proper investigation of the cause of accident will help to propose preventive measures in terms of design and control.

This one-day workshop programme is aimed to help understand the process of road safety audit as per IRC specification, recent developments in RSA and road safety audit practices in India as well as in abroad with case studies.

## Key Speakers & Brief about their Presentation

1. Dr. K. P. Subramanian, Visiting Professor, Division of Transportation Engineering, College of Engineering, Anna University, Chennai (Chief Guest)

Title: Disastrous Transport System, India

"Presented on motor vehicle act, 3Es in traffic engineering, safety of Non-motorized modes"

- 2. Dr. S. Lakshmi, Professor, Division of Transportation Engineering, College of Engineering Anna University, Chennai
- Title: Road Safety Audit Various Stages
- "Presented on various stages involved in road safety audit"
- 3. Mr. S. Satheesh, Deputy Director, Highway Research Station, Guindy, Chennai

Title: Road Safety Audit for a State Highways

"Presented on RSA done for a State Highways in Tamil Nadu"

4. Mr. Murali Balla, Senior Group Engineer, Global Design Center, WS ATKINS, Bangalore (couldn't able to attend due to unavoidable situations)

# Title: Road Safety Audit - From a UK Perspective

5. Dr. P. Vedagiri, Associate Professor, Transportation System Engineering, Dept. of Civil Engineering, I.I.T. Bombay

Title: Traffic Safety Evaluation of Uncontrolled Intersections Using Surrogate Safety Measures Under Mixed Traffic Conditions

"Presented on pro-active road safety audit (current Research)"

	Committee Members		
•	Dr.E.Ravindranath		- Workshop Convener
•	Dr.M.Selvakumar	-	Workshop Coordinator
•	Dr.V.Tamizh Selvi	-	Associate Professor
•	Dr.P.Venkateswara Rao	-	Associate Professor
•	Ms.Ruby Freya	-	Assistant Professor
•	Mr.R.Mathiyazahagan	-	Assistant Professor
•	Mr.G.Kumar	-	Assistant Professor
•	Mr.G.Arun	-	Assistant Professor
•	Mr.K.Arun	-	Assistant Professor

# About the coordinator

Dr. M. Selvakumar is a Transportation Planner having nine and half years of academic & consultancy experience after his Ph.D. He completed his Ph.D. in Transportation Engineering from Indian Institute of Technology *Madras* (2002-2007). He has completed his B.E. in Civil Engineering at A.C. College of Engineering & Technology, *Karaikudi* (1996-2000) and M.E. in Urban Engineering at College of Engineering, *Guindy* (2000-2002).

He has four and half years of academic experience as well as five years of consultancy experience. After his Ph.D., he started his career as Lecture at BITS-*Pilani* and taught for undergraduate students (2007-08). Then he has worked as a Traffic Engineer in *Abu Dhabi* and involved in synchronization of traffic signals using Si-traffic Scala (Siemens) (2008). During his stay at Abu Dhabi, he has undergone office training in VISSIM at Siemens, *Augsburg, Germany* for a period of 2 weeks. Then he joined in L&T Ramboll Consulting Engineers Ltd., *Chennai* (2008-2013) as an Engineering Consultant. As a consulting engineer, he involved in many traffic and transportation studies. During his stay at L&T Ramboll, he has undergone Leadership Skills Training conducted for a period of 15 days. Presently, he is working as an Associate Professor in the Department of Civil Engineering at Sri Venkateswara College of Engineering, *Sriperumbudur* (June 2013-till date).

# **Event Result**

Major outcome of the workshop are:

- Motor vehicle act should be updated to the current requirements
- Enforcement should be 'transparent' and effective. This will improve road safety
- Congestion fee in the CBD area may be implemented. This will generate fund to the government as well as reduce private mode usage
- Public transport system should cater to demand not for supply. Planners should consider demand side needs (frequency/reliability/comfort ability). This will encourage people to use public transport system. It may be noted that in Chennai, public transport share of ride was 57% in 1970, whereas now it is just 22%.
- Cyclists and pedestrians (Non-motorized Transport Modes) should be segregated from main traffic movement.
- Road Safety monitoring authority should be independent as Indian Railways
- There should be coordination between automobile manufacturers as well as highway design engineers. Some vehicles manufactured with a speed range up to 190 kmph

which is affecting the safety aspect of road users. Whereas our roads are designed for 100 Kmph (*37% of total accidents are due to over speeding*)

 Finally the workshop concluded with road safety audit should be proactive instead of reactive

Event P	Event Participants						
SI. No.	Name	Designation	Organisation				
1	Dheepika Ravindran	UG Student	SVCE				
2	Divya SS	UG Student	SVCE				
3	Svedha Gayathri S	UG Student	SVCE				
4	P Anbarasi	UG Student	SVCE				
5	Madhavi K	UG Student	SVCE				
6	Ramalakshmi S	UG Student	SVCE				
7	V.Santhosh Baboo	UG Student	JPR Engg. College				
8	Saranya. S	Assistant Professor	T.J.S Engg. College				
9	Rohini	Assistant Professor	T.J.S Engg. College				
10	Er.S.Kalaiarasi	Additional Director	Highway Research Station				
11	Er.S.Suganthi	Assistant Engineer	Highway Research Station				
12	Er.S.Sharmila	Assistant Engineer	Highway Research Station				
13	G.Rajesh	PG Student	RASTA, Bangalore				
14	Bhavani.S	Associate Project Consultant	L&T IEL				
15	Vasudeva.S	Associate Project Consultant	L&T IEL				
16	Abirami S R	Senior Engineering Consultant	L&T IEL				
17	Baskar S	Senior Engineering Consultant	L&T IEL				
18	Selvaraj.V	Senior Engineering Consultant	L&T IEL				
19	R.Gopalakrishnan	Assistant Professor	SVCE				
20	Dr.P.Venkateswara Rao	Associate Professor	SVCE				
21	Pawan Kumar	UG Student	SVCE				
22	K.Keerthana	UG Student	SVCE				
23	K.Narendiran	UG Student	SVCE				
24	M V Adithya	UG Student	SVCE				

# **Event Photos**



Workshop was inaugurated by the chief guest Dr.K.P.Subramanian



Dr.E.Ravindranath, Head of the Department, Civil Engineering lighting Kuthuvellaku



A view of audience in the workshop



Dr.P.Vedagiri receiving memento from Dr.P.Venkateswara Rao

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Workshop banner at the entrance of SVCE



HoD/Civil, distributing certificates to participants at the end of workshop



Group Photo: (sitting from left) Er.S.Satheesh, Dr.P.Vedagiri, Dr.E.Ravindranath, Dr.M.Selvakumar

#### Acknowledgement

I would like to express my sincere gratitude to the Institution of Engineers (India) and the management of SVCE for making this possible. I thank the chief guest and key speakers for lending us their valuable time and knowledge. It is our privilege to have you all in our campus. I also thank my Head, colleagues, supporting staff and my dear students, who have supported me all through our efforts for this to happen. I thank our college placement officer for letting us use this hall during the placement work going on in our institute. I also thank Dr.J.Venkatesan, HoD, Automobile Engineering for helping me with accommodation. Finally I thank our college transport in-charge Dr.S.Saravanan, Professor-Mechanical Engineering and all the staff who have helped in making a success.

#### List of Enclosures CD containing presentations : 1 No.; Workshop brochure : 1 No.; Head of the Department Department of Civil Engineering Sti Venkateswara College of Engineering Sriperumbudur -502 117. INDIA. Signature of the Coordinator Signature of the Head of the Department Dr.M.Selvakumar Dr.E.Ravindranath Associate Professor Professor & Head, Department of Civil Engineering, Department of Civil Engineering, Sri Venkateswara College of Engineering Sri Venkateswara College of Engineering Sriperumbudur

Sriperumbudur

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#### Annexure I Proposal Acceptance Letter from IE (India)

#### Fwd: Workshop on "Highway Geometry Design: Road Safety Audit Perspective"

Dr. A.C.Muthiah Chairman <acm@svce.ac.in> Tue, May 24, 2016 at 11:03 AM To: SELVAKUMAR M CVE <msk@svce.ac.in>, RAVINDRANATH SVCE <hodce@svce.ac.in>, Principal SVCE <principal@svce.ac.in>

------Forwarded message ------From: <alok.basu@ieindia.org> Date: Tue, May 24, 2016 at 10:33 AM Subject: Workshop on "Highway Geometry Design: Road Safety Audit Perspective" To: acm@svce.ac.in Cc: kalpakkamlc@ieindia.org

E-mail: acm@svce.ac.in

TECH/D.35/IM-000111-4 23 May 2016

Dr M Selvakumar, Associate Professor, Department of Civil Engineering, Sri Venkateswara College of Engineering, Post Bag No. 3, Pennalur, Sriperumbudur, PIN : 602 105

Dear Sir,

This has reference to your letter no. nil dated 12.02.2016 proposing to organize Workshop on "Highway Geometry Design: Road Safety Audit Perspective" on September 09, 2016 under the aegis of your college.

We have pleasure to inform you that your proposal has been accepted by the "Empowered Committee of Directors" and allocated a sum of Rs. 10,000/- for the said activity from the financial year 2016-17. Kindly note that the aforesaid amount can only be released after the culmination of the activity and also after receiving the following documents from your end :

i) Report of the technical activity along with a few photographs depicting the main features of the said Workshop;

ii) Recommendation, if any;

iii) Proceedings / CD consisting of technical papers presented in the Workshop; and

iv) Any other item related to the activity.

Meanwhile, we request you to kindly take appropriate action at your end in order to organize the said activity in a befitting manner so that all the stake holders who would attend the Workshop get benefit out of it and thereby serve profession in a better manner.

Anticipating your success we thank you for taking interest in organizing the activity.

Thanking you, Yours faithfully, (Alok Basu) Deputy Director (Technical)

cc: The Honorary Secretary Kalpakkam Local Centre of IEI Email: kalpakkamlc@ieindia.org