

# NATIONAL ENERGY CONSERVATION AWARD 2008 - MUNICIPALITY



SUBMITTED BY :  
STREETLIGHT DEPARTMENT  
VADODARA MUNICIPAL CORPORATION  
VADODARA

NOVEMBER 2008

# DESIGN BASED STREET LIGHTING INNOVATION BY VMSS



- VMC has implemented Design based Street lighting in the year 2000 & 2008 based on IS - 1944
- Best practice award Winning from CMAG, ICMA & ICLEI.
- Highest standard Specifications adopted in 2008

# FUNCTION & BENEFITS OF STREETLIGHTING

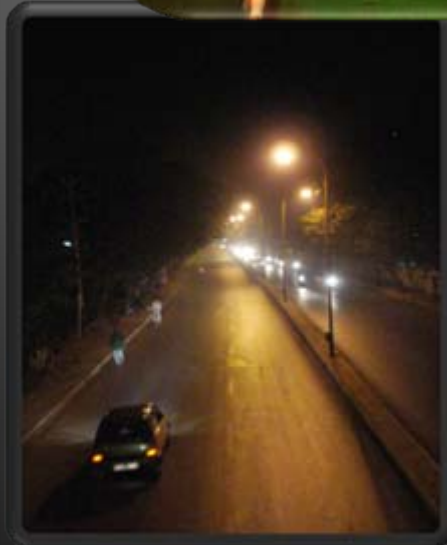
## FUNCTION

- Safety of Traffic
- Improve visual guidance
- Security of Persons
- Provide a pleasant Environment

## BENEFITS

- Accident reduction
- Crime reduction
- Efficient use of roads
- Orientation
- Comfort

# LIGHTING EFFECT BEFORE 2K



# LIGHTING EFFECT AFTER 2K



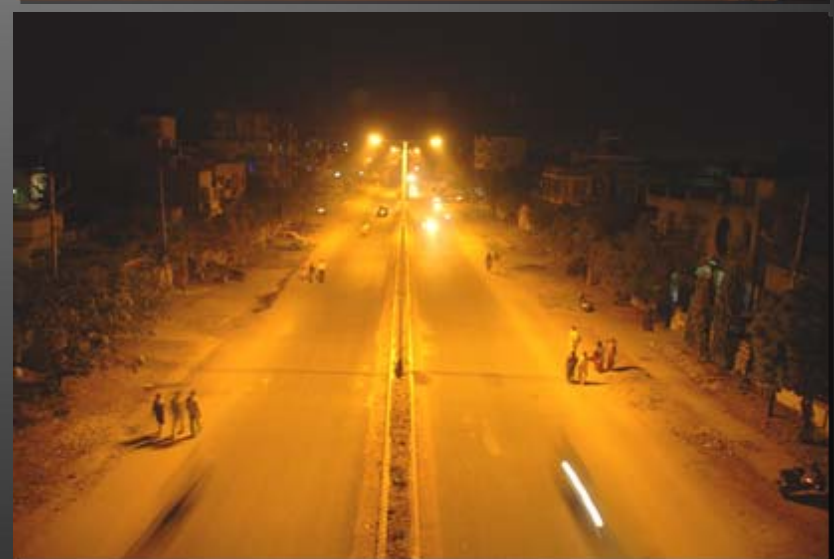
# COMPARISON OF LIGHTING EFFECT BEFORE AND AFTER 2K



**STAGGERING DURING LEAN TRAFFIC TIMINGS (AFTER 11.00 p.m.) ON VIP ROAD  
ADVANTAGES : SUBSTANTIAL SAVINGS IN ELECTRICAL CONSUMPTION (29%)**



# INTERNATIONAL LIGHTING LEVEL IN THE YEAR 2008



# Design based lighting and Electrical Saving by adopting different methods.

## LIGHTING AFTER 2000



STAGGERING DURING LEAN TRAFFIC TIMINGS (AFTER 11.00 p.m.) ON VIP ROAD  
ADVANTAGES : SUBSTANTIAL SAVINGS IN ELECTRICAL CONSUMPTION (29%)



STAGGERING 20% ENERGY SAVING

## LIGHTING IN 2008



DIMMING 40% ENERGY SAVING

# INTELLIGENT STREETLIGHT CONTROLLER WITH DATA TRANSFER FACILITY THROUGH GSM

- Switching ON & OFF as per sunrise & sun set timings.
- Remote supervision & control from Central computer with the help of GSM technology.
- Effective Street light Management.
- Response time 90 seconds.



# TOP NOTCH SPECIFICATIONS FOR LIFE CYCLE COST REDUCTION



## 250W HPSV IP-66 LUMINARY

- Prevent entry of Dust & Insects.
- Light output will be maintained through out the life of the luminary.



## 250W HPSV SON-T Plus LAMP with Higher lumen efficacy (32000 .lumens), Burning Life 25000hrs

- 35 lux level International Standard Lighting design.
- Lamp will not be required to be replaced before 10 yrs.

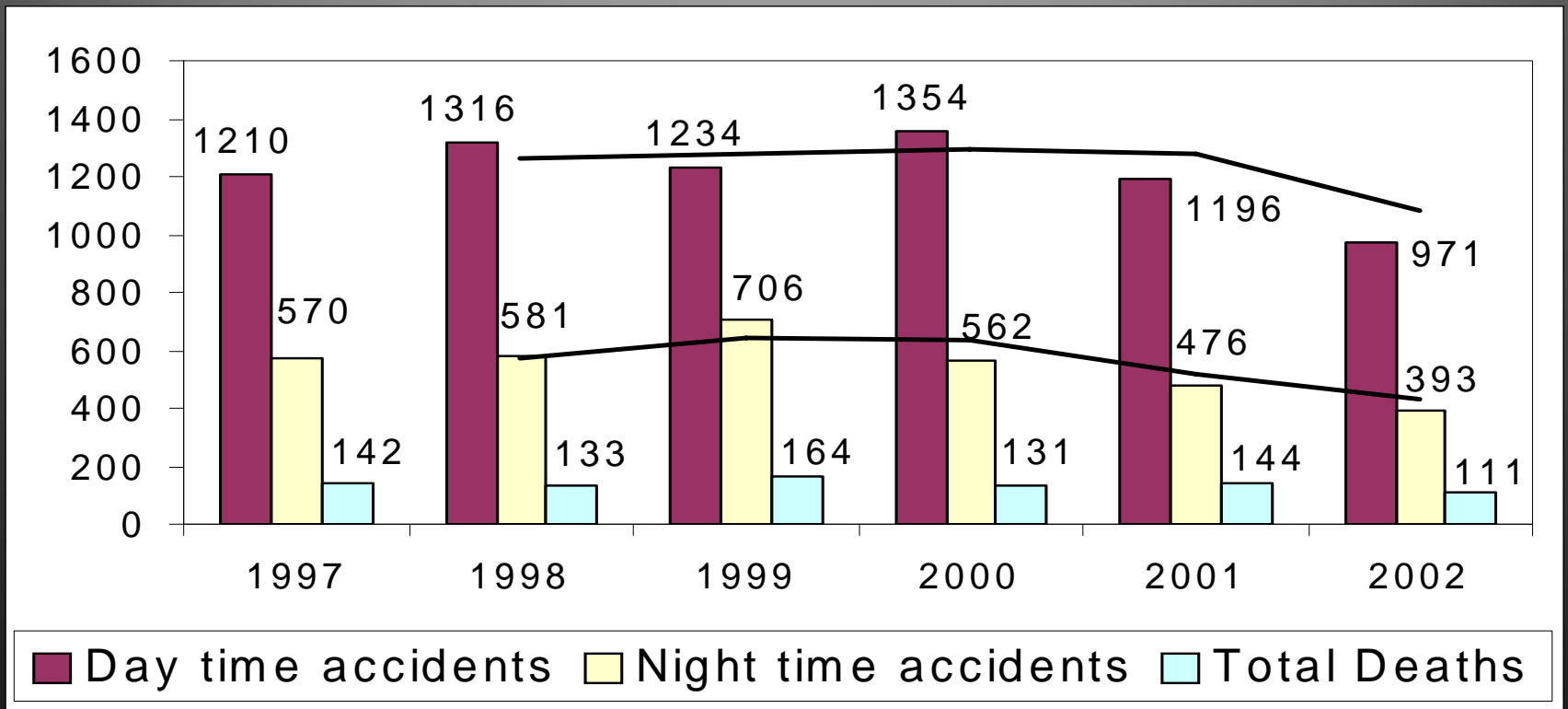


## 12 Mtr Steel Tubular step pole with ISI mark(190 Kg)

- Esthetic Look & sturdy.
- Long life.

# BENEFITS OF DESIGN BASED STREETLIGHTING

## Accident Reduction



Source: -Traffic Police, Vadodara