



Association of Tamil Nadu Highway Engineers

Recognised in GO Ms No. 1814 Public (Services) Dept., Dated 21.05.1956

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Letter No.51/2018

Dated: 04.06.2018

To

**The Secretary to Government (Expenditure) / (E.O),
Member Secretary, Staff Rationalisation Committee,
Finance (SRC-1) Department,
Secretariat, Chennai - 9**

Sir,

**Sub: Finance Department - Constitution of Staff
Rationalisation Committee to evaluate Staff
Structure and administrative expenditure
management in Government Departments and
Government agencies - suggestions - submitted**

**Ref: The Government in Finance (SRC-1) Department
Letter No. 27244/SRC-1/2018, dated 25.05.2018**

We submit the following suggestions for favour of consideration and appropriate recommendations:

Highways Department, established in the year of 1946, is in-charge of construction and maintenance of roads of all categories such as National Highways, State Highways, Major District Roads and Other District Roads and River Bridges, Road Over bridges, Road Under Bridges and Grade Separators on the above roads. The Department also has wings like 'Designs' and 'Research' for conducting investigation, preparation of Design and estimates and for studying the latest technological trend in Highways engineering to adopt the same in the State of Tamil Nadu.

The cadre strength of various categories of Engineers in Highways Department is as follows:

| | |
|----------------------------------|-------|
| 1. Assistant Engineer | - 972 |
| 2. Assistant Divisional Engineer | - 467 |
| 3. Divisional Engineer | -140 |
| 4. Superintending Engineer | - 29 |
| 5. Chief Engineer | - 9 |

After the advent of liberalisation of economy in 1990s, the flow of funds to the Highways projects is increasing year after year. The construction technology in Highways sector has also been undergoing lot of changes. The trend has changed the environment of the offices of Engineers at different levels. The contract documents, billing procedures, etc., are changed totally. The personal involvement of engineers is required at all levels of the execution of a project. Earlier, the preparation of estimates and tender documents, preparation of bills and checking them, etc., were done by the Draughtsmen and Ministerial staff of the Department. After the evolving of modern contract management which entails price adjustment, bonus, liquidated damages, etc., the engineers have to involve themselves in the above original works that were done till recently by the Draughtsmen and Ministerial Staff.

The above staff strength was sanctioned in the year 2010, when the total allotment for the Department was about Rs.2500 Crores. But, now the total allotment is about Rs.11000 Crores. Even allowing 10% increase per annum, the current allotment is more than double of the allotment when the staff pattern was approved. The pressure of work is felt at all levels, from Assistant Engineer to Chief Engineer. The wing-wise break-up of the allotment is as under :

| | | |
|-------------------------------------|---|-------|
| National Highways | : | 1126 |
| Construction and Maintenance | : | 7167 |
| Projects | : | 732 |
| Tamil Nadu Road Sector Project | : | 503 |
| Highways Research Station | : | 31 |
| NABARD and Rural Roads | : | 1002 |
| Planning, Designs and Investigation | : | 15 |
| Metro | : | 482 |
| Director General | : | 10 |
| Total | | 11068 |

It may not be out of context to state that the funds (about Rs.3000Crores, for the current year) provided by the Government of India to

the NH wing for the execution of various schemes/projects are not reflected in the printed budget of the State Government. Also, it may be noted that the funds are not distributed equitably; the C and M wing gets 70% of the total allotment and the others share the remaining 30%

Budget Provision alone is not the work load:

The Budget provision made for the works constitutes only a portion of the work carried out in the executing Divisions and Sub Divisions. There are numerous other items of works, which consume considerable portion of the working time of the regular Divisional Engineers, Assistant Divisional Engineers and Assistant Engineers. These items of work do not get reflected in the grant or expenditure of the respective units. A few examples of such works are:

- (i) preparing proposals or Detailed Project Reports for various Projects conceived by Senior Engineers and Public Representatives (It is to be noted that the major portion of these proposals do not get approval of the Government)
- (ii) guarding the Highways assets against encroachments on the roadside, as the Ribbon development is triggered once the Highways is opened for traffic, which results in encroachments
- (iii) preparation of Land Acquisition proposals for Highways projects in coordination with Revenue Department
- (iv) coordinating with Government Law officers in the matters of litigations relating to land acquisition, eviction of encroachments, Public Interest Litigation, service matters, etc.,
- (v) liaising with the officials of line Departments for shifting the utilities, as the new contracts like EPC (Engineering, Procurement and Construction) require the Engineers to be facilitators also.

Importance of Supervision in Engineering:

Unlike other fields, engineering works require close supervision by competent / qualified engineers, for the works cannot be checked for quality after the works are completed. Though some tests are available to check the quality after completion, they are either destructive methods or random sampling methods. Both of them cannot assure the quality cent percent.

Importantly, the entire amount invested in the projects will go waste, if cent percent quality is not ensured. Because, the rectification of the substandard construction after the completion, will consume more money than the original cost. So, the amount spent on the engineering establishment is nothing but a part of investment, nay value addition. At present, about 10% of the allotment of Rs.11000 Crores, goes to the establishment charges. In fact 10% is useful in converting the entire allotment into an investment.

Expansion of the Department is essential:

The modern methods of Highways Construction have opened up a wide spectrum of activities in the sector. The Department has to usher in a new era where the fields such as, forensic studies, alternate dispute redressal mechanism, modern contract management, road safety audit, information technology applications, newer funding methods, green technology applications, methods of rehabilitation and resettlement of project affected persons etc., have to be explored. Each of the above areas is special and important for all projects and requires experts in the field.

The shortage of man power available, at present, in the Department does not allow the expansion in the above fields. Recruiting and training engineering personnel in the above fields should be done continuously; not on adhoc basis.

The government may explore ways to attract young talents in the above fields and to find methods to retain those talents by offering them commensurate salary or service conditions such as Assured Career Progression, etc.

Method of Recruitment :

As per Tamil Nadu Highways Engineering Service Rules, Assistant Engineers are directly recruited by TNPSC from candidates with minimum qualification of B.E (Civil Engineering). Due to various administrative reasons, the recruitment to the post of Assistant Engineer is not done every year. The year of TNPSC recruitments, number of engineers recruited and expected years of service required for their first promotion, pertaining to the recruitments in the recent past are tabulated below for consideration.

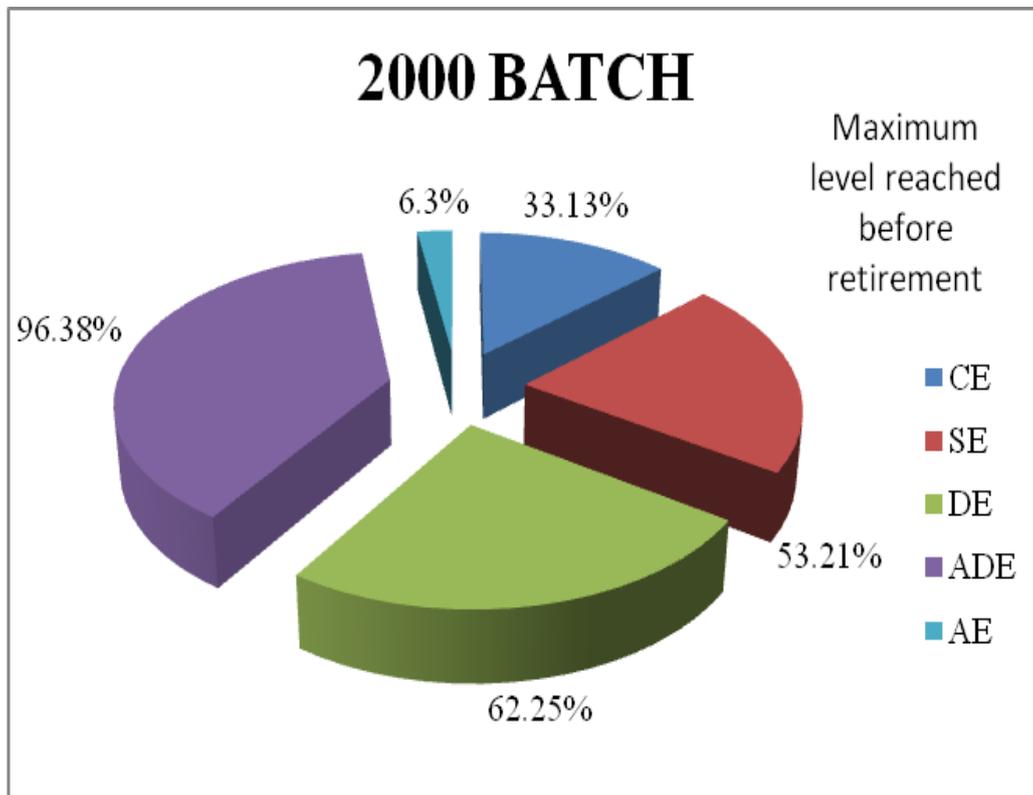
| Sl. No. | Year of Recruitment | Year of Joining | Total No. recruited * | No of Persons retiring with 1 st promotion (ADE) only | Average No. of years required / will be required for 1 st promotion (ADE) ** | Remarks |
|--|------------------------|-----------------|-----------------------|--|---|---|
| 1 | 1993-1995 & 1995 -1996 | 1998 | 351 | 78 | 14 years | The first level promotion for the batch starts in 2007 and ends in 2015 |
| 2 | 1997 -1998 | 2000 | 250 | 97 | 20 years | The first level promotion for the batch starts in 2016 and ends in 2024 |
| 3 | 2006 -2007 | 2007 | 242 | 85 | 21 years | The first level promotion for the batch starts in 2024 and ends in 2031 |
| <p>Note : * As available in the Seniority list published by the TN Highways Department ** Calculation is based on the average No. of years required for promotion for the first person and the last person in the batch</p> | | | | | | |

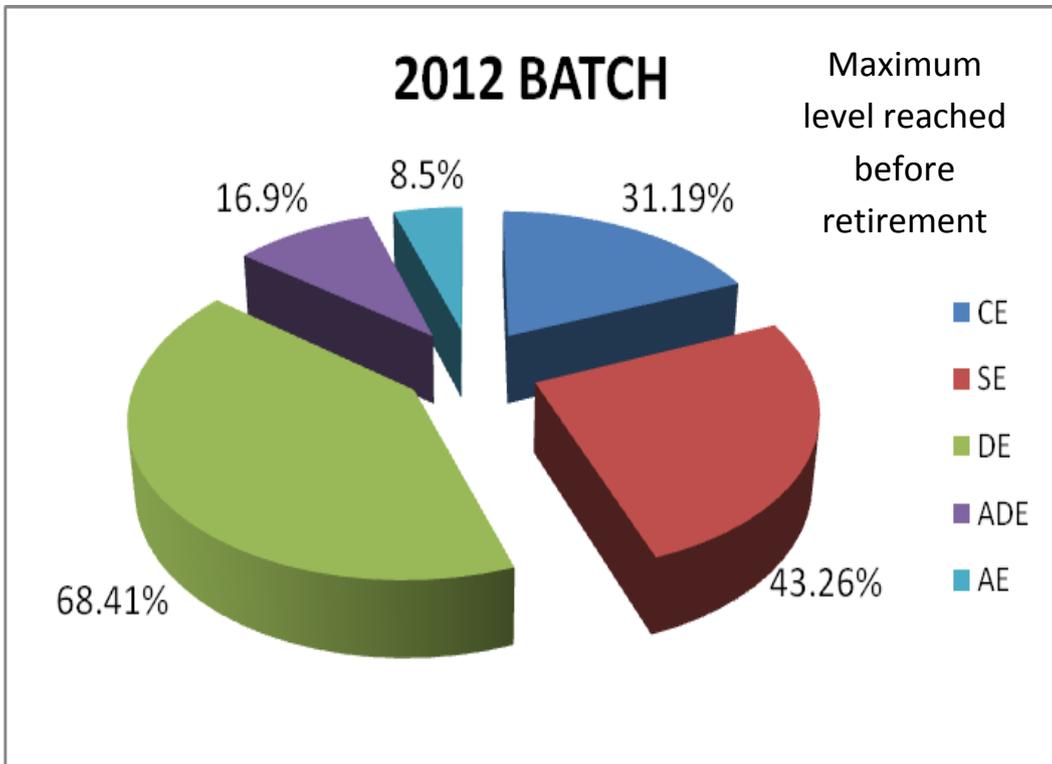
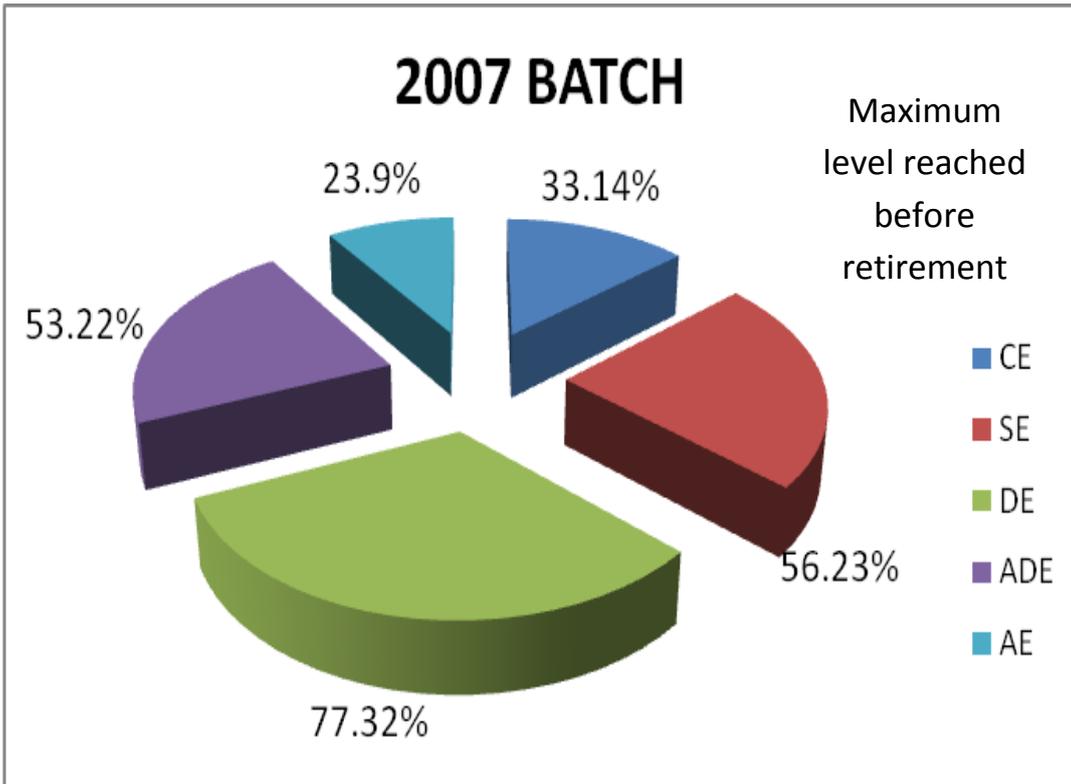
The table would show that the recruitment was not done every year; instead, once in 3 or 4 years resulting in bulk recruitments of 200 or 300 Engineers. When 200 or 300 Engineers are recruited, there is every chance of many Engineers retiring without even getting the second promotion. So, the stagnation in promotion among the Highways Engineers has become a routine one. It is not possible for every human being to have sustained interest in his work if he stagnates in his post for more than a decade, with his growing financial commitments, with the fast eroding value of his salary and the natural deterioration of his physical and mental stamina due to the advancement of age. The Government, as a model employer, should devise ways of creating and sustaining the interest of its employees in their work throughout their service.

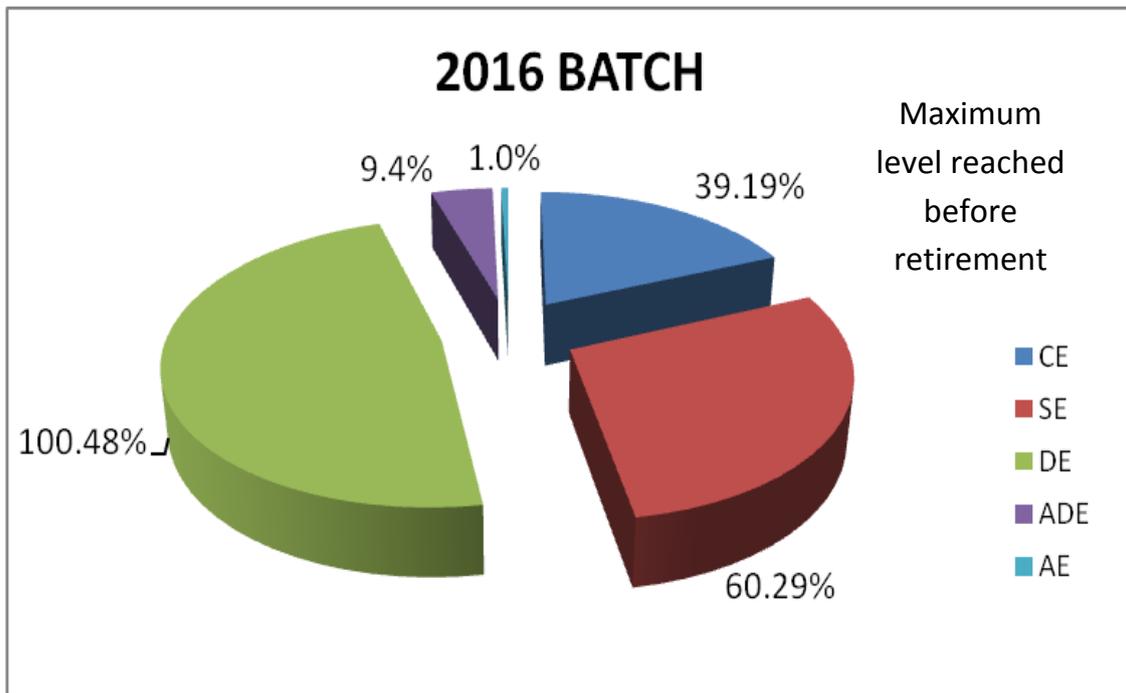
Stagnation in Promotion

An overview of the career prospects of the engineers of various batches gives only a gloomy picture. The following table gives the number of engineers retiring in the positions noted against each of them.

| Batch | 2000 | 2007 | 2012 | 2016 |
|--|-------------|-------------|-------------|-------------|
| Maximum level reached before retirement | | | | |
| CE | 33 | 33 | 31 | 39 |
| SE | 53 | 56 | 43 | 60 |
| DE | 62 | 77 | 68 | 100 |
| ADE | 96 | 53 | 16 | 9 |
| AE | 6 | 23 | 8 | 1 |
| Total No.of Recruitment | 250 | 242 | 166 | 209 |







The acute stagnation of promotion has left most of the engineers, particularly the ones, who are in the lower ranks of seniority, disgruntled.

Appointment by Outsourcing / Contract:

The method of out sourcing has not been tried in the Department on a large scale. This was tried in a small scale in the TNRSP Wing of the Department which is in-charge of World Bank funded scheme. Though some posts in the subordinate service, like, Assistants, Draughting Officers, etc, were filled through outsourcing, engineers were not appointed by this method. Even if the engineers had been appointed, it would not have been successful, because engineers are involved in the expenditure of Finances of the Government. The appointees by outsourcing may be held accountable; but enforcing punishment may not be easy, for they can get away easily and quickly. The diligence can be expected only of regular / permanent employees.

Contract appointment is in no way better than the outsourced appointment so far an Engineering Department is concerned; since, the appointment does not follow any rigorous recruitment process – which is followed in the case of regular appointment. So, the allegiance of appointees on contract will be only to the persons who help getting the appointment. They cannot be expected to be loyal to the Government.

As lot of public money is involved in the execution of Highways Projects, there are chances aplenty for an engineer to indulge in wrongdoing. Punishing the guilty and promoting the right persons will alone ensure the quality of works.

Both punishment and promotion are not easy in the outsourcing and contract methods of appointment, and hence these methods are not suitable for engineering posts. Also, in an Engineering Department, the powers of different cadres of Engineers vary widely. So, the appointments by outsourcing/contract will further aggravate the service conditions of engineers whose promotion chances are already gloomy; the same will reflect very badly in the efficiency of the department also.

In view of the foregoing details, we request that the following recommendations may be sent to the Government

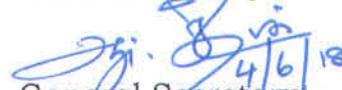
- (i) outsourcing / contract methods of appointment are not suitable for engineering posts in the Highways Department
- (ii) the staff structure has to be reworked for ensuring equitable work load amongst the engineers of various wings of the Highways Department
- (iii) all the existing posts are necessary for the execution of works whose total value come to about Rs.14000 Crores and actually additional posts are required to avoid time and cost over-runs
- (iv) the quality of works can be ensured only by posting adequate number of engineering staff and hence strengthening, in consultation with the Chief Engineers, should be taken up at the earliest
- (v) to improve the morale of the engineering cadre, Assured Career Progression Scheme like the one available for Tamil Nadu Government Doctors, should be made available to Engineers
- (vi) the system of recruiting Junior Engineers from feeder categories like Draughting Officer, Road Inspector, etc., may be done away with, for the salary of Assistant Engineer with BE degree qualification is almost equal to that of Junior Engineers with Diploma qualification and the efficiency of the Department can be improved by posting BE degree holders at the same expenditure towards salary. This will lead to

better expenditure management, in view of expenditure – efficiency analysis.

We also request that an audience may be given for explaining further the necessity of strengthening the engineering establishment in the Highways Department.

Thanking you,

Yours faithfully,


General Secretary

Copy to:

The Director General, Highways Department - with a request to forward suitable recommendations to the Committee