

# The Way We Recruit and Train Road Engineers

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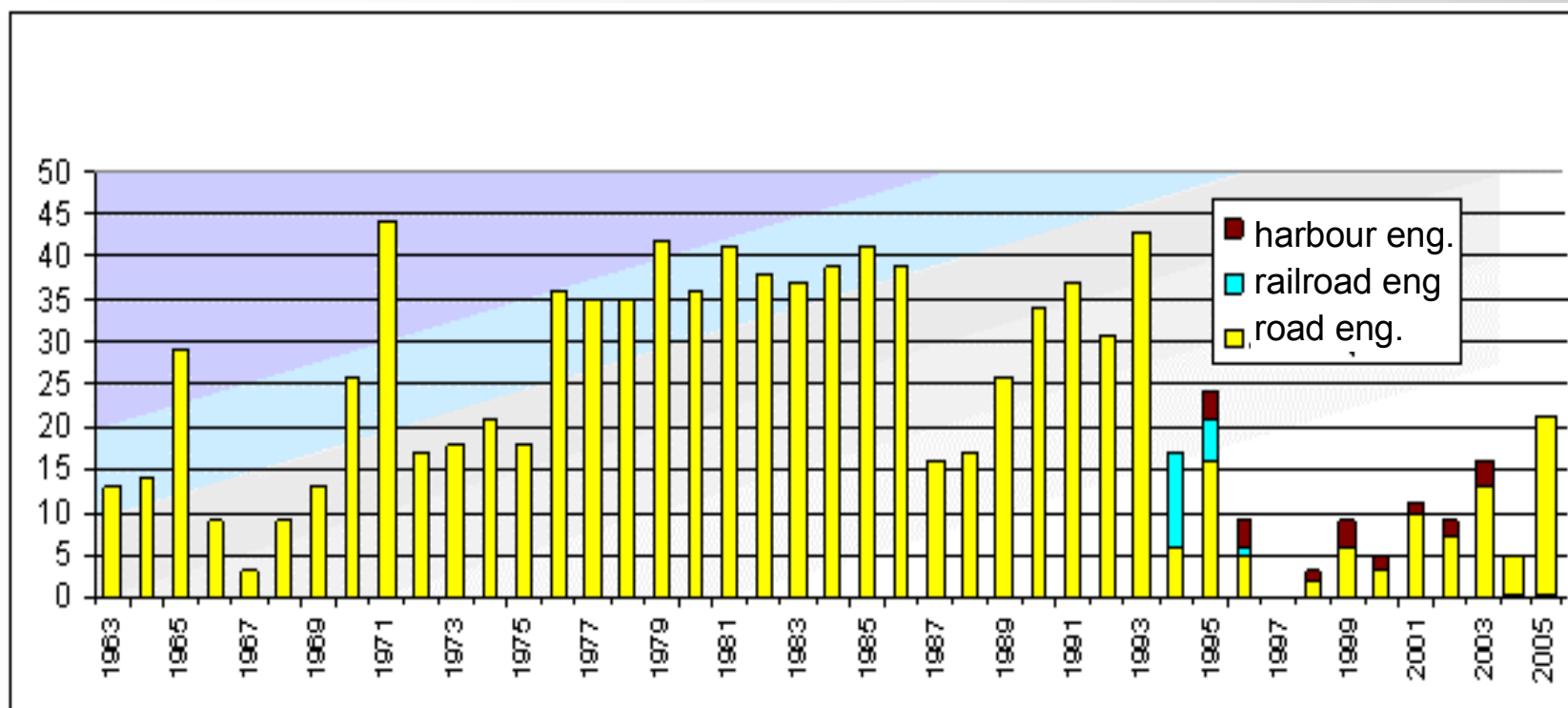


# Recruitment

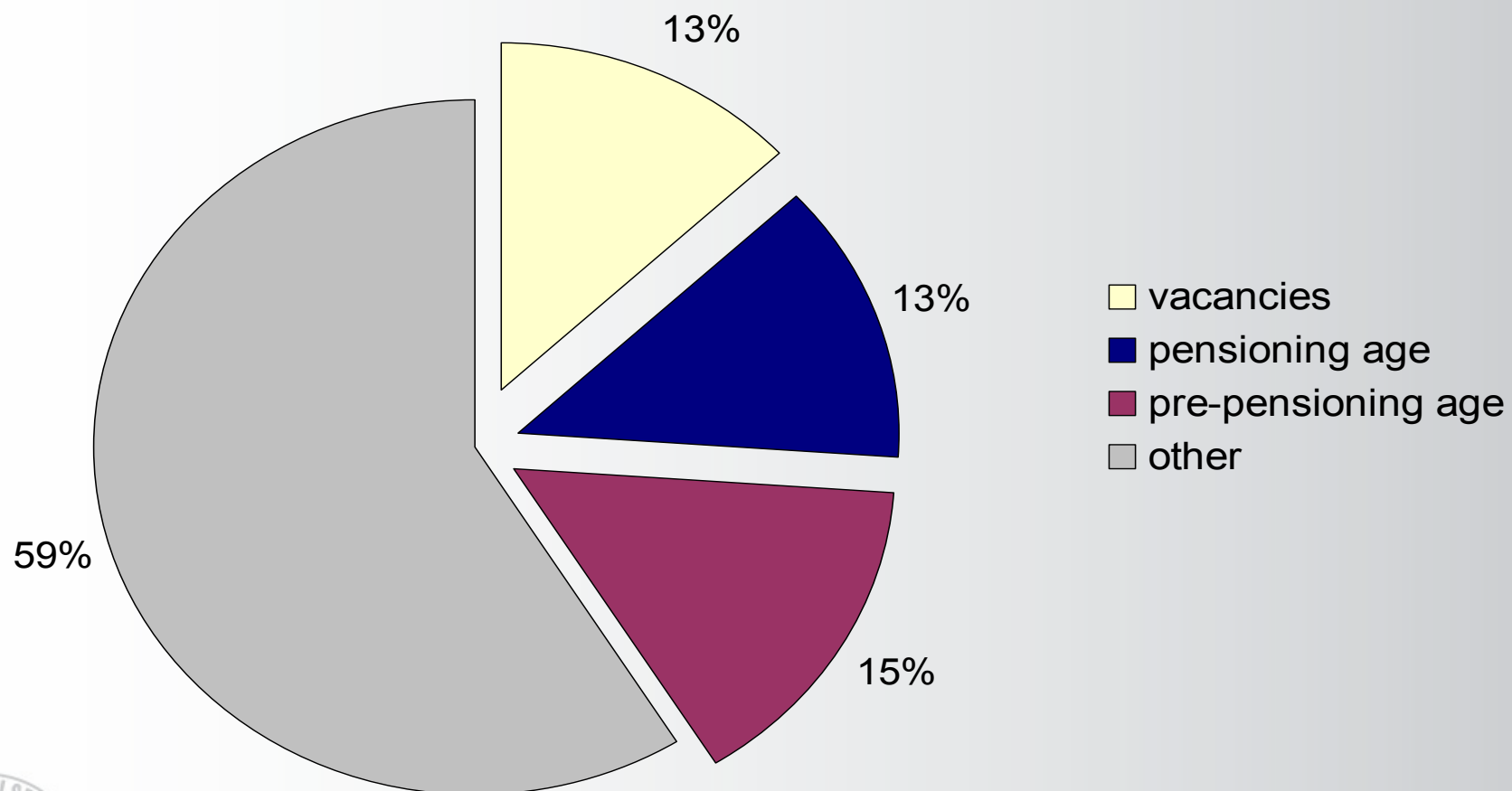
- The aim of human resource management is to provide Latvian State Roads with competent and well-motivated staff.
- The numbers of road engineers on the Latvian labour market are very limited.
- In the beginning of 1990ies the job of a road engineer was not a prestigious one and road engineers were prepared in very small numbers.



# Number of graduate engineers



# Shortage of road engineers



# Retention of staff

- attractive working conditions;
- competitive system of rewards;
- a good social benefit package;
- up-to-date facilities (office equipment, personal computers, mobile phones, office cars);
- opportunities for professional development (local & international training, seminars & conferences).



# Redistribution of responsibilities and tasks

To avoid from overloading the road engineers we have introduced new positions:

- 1) project assistants;
- 2) road technicians or junior engineers.



# Attraction of new staff members (1)

- No problems with qualified office staff and accountants, lawyers, economists, secretaries, etc;
- To find qualified road, bridge and traffic safety engineers in Latvia you need to be very skilful and use all sorts of recruitment techniques;
- The most effective is “headhunting”;
- Attention to the upcoming shortage of qualified road engineers already 9 years ago.



# Attraction of new staff members (2)

- inform Ministry of Transport about the shortage of road engineers;
- support road and bridge engineering studies at the College of Transport Structures and the Riga Technical University (RTU);
- award scholarships and prizes for best scientific works in the field of road, bridge and traffic engineering;
- introductory meetings with the 1st year students of the RTU;
- “Shadow Days” for schoolchildren to learn about work of road engineers / project managers and production engineers;
- Career Days for senior schoolchildren to popularise road engineer’s profession;
- free of charge visits for schoolchildren to the Latvian Road Museum;
- convince our government to subsidise more engineering students.





# Training and Development

- Conduct internal company seminars for specific job groups;
- Send individuals to open courses offered by the Latvian training companies or develop training programmes suitable just for our people;
- Send individual experts and specialists to international seminars, conferences and congresses;
- Organise technical excursions abroad.



# Problems for continuing training

- Universities ensure academic education;
- Lack of training institution for continuing education for road, bridge and traffic engineers:
  - each company in the road industry has to manage this issue with its own capacities;
  - each company has to employ or hire people who can organize training courses for the engineers;
  - these people in their turn have to look for suitable lecturers, design appropriate programmes, hire training rooms, etc.
- Problems with former education.



# Problems with former education

- Previously:
  - education and work in socialist union of states, under planned economy, governed by 5 year plans;
  - situation on the roads much different from today (less traffic, etc.).
- Now:
  - EU & market economy relations;
  - more traffic and greater speeds;
  - increased requirements of the road users for efficiency, quality, safety and comfort on the road network;
  - financing for road management has not increased.



# Initial activities

- professional training for road engineers was hard to find locally;
- engineers thought it was important to receive good training now and then;
- especially worthwhile it was to learn practical things, participate at international seminars and conferences abroad;
- good professional relations and personal contacts were established with foreign partners.





# BRA / NRA seminar on continuing education

## - milestone for finding new solutions

- Questions raised:
  - Why there is a need for qualified engineers?
  - What new skills and knowledge formerly educated engineers lack?
- Sharing experience on continuing education programmes:
  - responsible institutions for organising this type of education;
  - their cooperation with the employers;
  - content, duration, certification of such programmes;
  - teaching/training staff;
  - financing for such programmes (amount, donors);



# Proposed solution for continuing training (1)

- Latvian State Roads, Latvian Road Association, Latvian Road Builders Association and Riga Technical University would set up Educational Council of the road industry (ECRI) with the aim to define training themes for continuing education programme;
- Training Centre should be established and located in the Building Faculty of the Riga Technical University (RTU), in the auspices of the Road and Bridge Department;
- Training courses should involve theoretical and practical training. The practical training should be organised together with the concerned companies so that the training process is best suited for professional needs.



# Proposed solution for continuing training (2)

- Continuing education should include courses of several levels and the MSc professional studies programme “Transport Structures”:
  - the first level, self-teaching level;
  - second level courses devoted to a specific topical issue; participants receive certificates;
  - third level courses; participants pass exam & receive certificates; the content of themes much broader;
  - the fourth and highest level - MSc professional studies at the RTU.
- Teachers/trainers should be selected from the leading road specialists from Latvia and also from recognised teachers from Latvian educational institutions.





## Proposed solution for continuing training – attraction of finances

- Road industry companies interested in setting up a regular training basis for their employees would finance the establishment of the new training system;
- Additional funding should be searched by applying to the EU Social Fund;
- When the system is established, financing would come from the course fees and donations from institutions, international foundations, etc.



# Achievements

- 9 months later:
  - Educational Council of the road industry established,
  - Training Centre opened at the RTU,
  - programmes for seven short courses prepared and confirmed, four of them have already been conducted.
- Educational Council is summoned once per month regularly and is dealing with issues relating to the further education of road engineers.
- Educational Council is open to new ideas, solutions, exchanges of experts, etc. from our international community.



# Further steps

- Present bottleneck - lack of academic and professional university training programmes for traffic safety engineers;
- Third level course programmes still not ready as there is a need for completely designed programme involving professional, economic, managerial, etc. subjects, not just for separate courses;
- Your advice and ideas are very welcome.



# Questions

