



Make Mn/DOT work better

AASHTO – The Voice of Transportation

Subcommittee on Design

New Ideas In Recruitment and Retention of Engineers

Major Areas of Focus

Recruitment

Hiring the best

Retention

Keeping the best

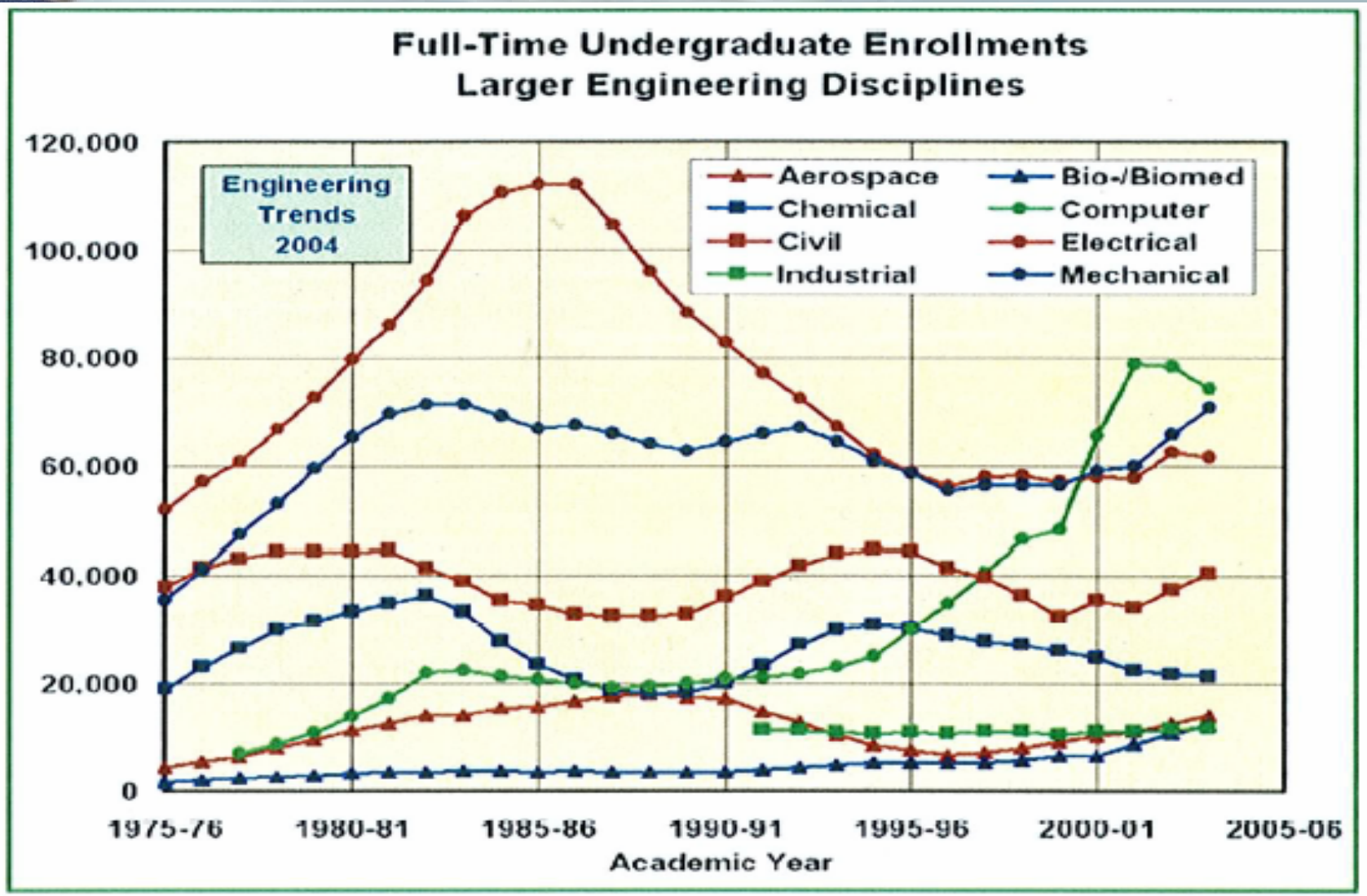


Mn/DOT's Challenges

- *Nearly 35% of Mn/DOT's most seasoned and skilled transportation workforce will be eligible to retire in the next 3-5 years*
- *Decline in national and local student enrollments in Civil Engineering/technology programs*
- *Diversifying the workforce to mirror Minnesota's changing demographics*
- *Budget constraints and competition to hire & keep the best*



CE trends show a stable enrollment at around 40,000, but needs are likely to increase due to infrastructure deterioration. For additional information visit <http://www.engtrends.com>



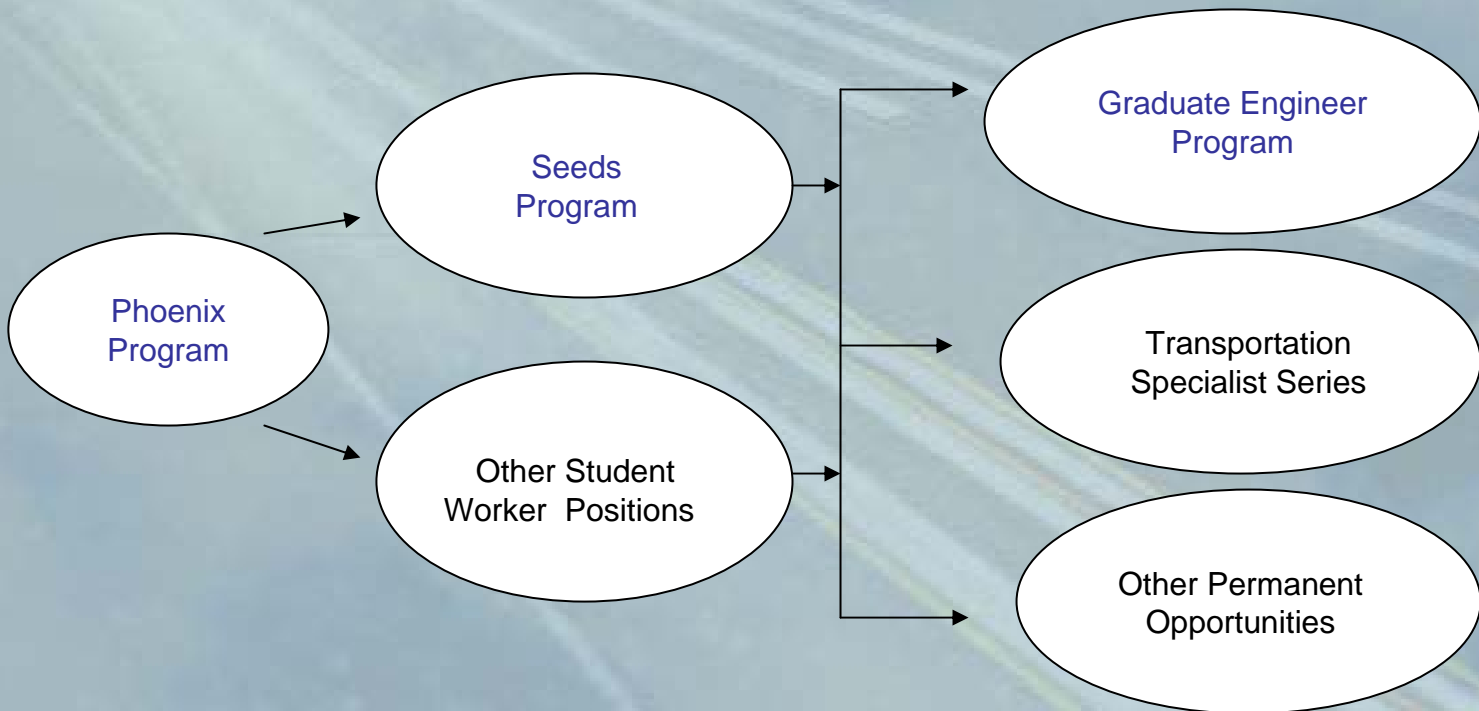


Mn/DOT's Innovative Solutions

- Career track recruitment programs
- Innovative hiring practices
- Knowledge transfer initiatives
- Attractive retention initiatives



Career track recruitment programs



High School Students

Tech School/University Students

Full time employees



Phoenix –Seeds –Grad Programs Advantages

Phoenix Student Worker Program(1-2 years)

- Targets high schools w/pre-engineering curriculum
- Early Introduction to Mn/DOT careers

Seeds Student Worker Program(1-4 years)

- Targets minorities and economically disadvantaged students
- On-the-job experience that complements Students' academic majors
- Training, development & mentoring

Graduate Engineer Trainee Program (1-2 years)

- Rotation opportunities across a variety of areas at Mn/DOT
- Comprehensive on-the-job training towards professional registration
- Specialized training & development opportunities
- External rotations



The Phoenix Internship Program -1

- Partnership with Project Lead The Way (PLTW) national Program Schools- specifically designed to increase young people pursuing engineering and technology degrees (www.pltw.org)
- 5 High Schools involved
- 2 year Internship
- Feeder to SEEDS Program
- During School Year- students attend Mn/DOT funded special events, ½ day road trips



The Phoenix Internship Program -2

- Work required during summer break and other times (\$10 per hour)
- If student plans to attend a Mn college are offered appointments to SEEDS program
- Must be nominated by School Counselor
- Our 5 Phoenix Student Group GPA averages 3.7 in Nov 2005
- FFI- Robert Lowe, MNDOT,
Robert.Lowe@dot.state.mn.us



Innovative Hiring Practices

Agency Promotional Recruitment & Hiring

- Improves employee morale
- Reduces training-in time
- Supports Mn/DOT's career track programs

On-the-spot job offers

- Competitive recruitment edge on campus

Rule 10's

- Just-in-time hiring
- Flexibility of hiring mid-career/experienced talent

Re-hiring retirees

- Valuable knowledge transfer
- Flexibility & preservation of quality



Knowledge Transfer Initiatives

- Re-hiring retirees
- Leadership Exchange Program
- Planner & IT Exchange programs being developed
- Developing e-learning training modules in various functional areas
- Increased awareness of the importance of knowledge transfer with an aging workforce



Attractive Retention Initiatives

- Attractive benefits package
- Recognition programs (service/above & beyond awards etc.)
- Flexible work schedules/telecommuting
- Mobilities/Job shadowing
- Cross-functional Skill enhancement opportunities for TSS
- Comprehensive training & development opportunities
- Tuition reimbursement program
- Health and Fitness programs
- Diversity initiatives
- Mentoring program



Interesting facts & figures

- **The Graduate Engineer Rotation program has a 95% retention rate for grad trainees**
- **7 of 10 grad trainees hired in the past year were internal hires (4 Seeds graduates; 3 others)**
- **68% placement rate of Seeds student graduates**
- **95% of Mn/DOT employees attended at least some training in the past 12 months**
- **20 managers participated in the Leadership Exchange Program in the past 4 years.**



MN/DOT Engineer Salaries

- Engineer 1 Graduate- \$36,248 - \$51,407
- Engineer 2 Graduate- \$40,716 - \$55,541
- Senior Engineer (PE Reqd)-\$49,444 - \$71,043
- Engineer Principal-\$53,432 - \$79,803
- Engineer Administrative- \$60,009 - \$88,406
- July 2006 Figures from Contract



Graduate Engineer Program

- In place for 25+ years
- Centrally located and coordinated
- Budget allocated centrally
- Reports to top staff
- Nationally recognized for innovative technology
- For additional information contact -
Jolene Forman, Program Manager
395 John Ireland Blvd., St. Paul, MN 55155
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Seeds Program

- On-the-job work experience for students
- In place for 13 years
- Funded in Mn/DOT's base budget
- National and State Recognition
- Minority/Economically Disadvantaged students
- Feeder for Graduate Engineer Program
- For additional information contact –
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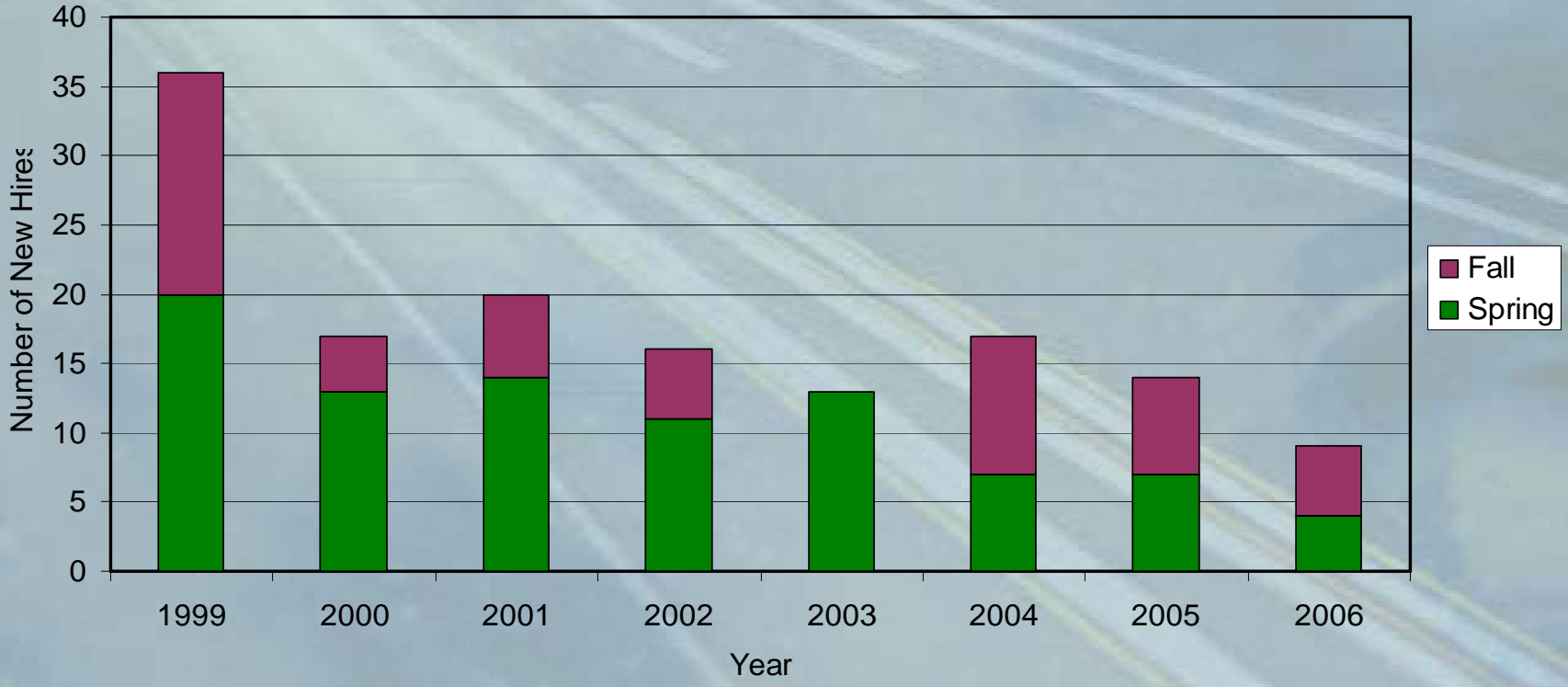
Mn/DOT Engineers Eligible to Retire

- Engineers eligible to retire in 2006 – 37
- Engineers eligible to retire by 2008 – 16
- Engineers eligible to retire by 2010 – 12
- Total Projected Retirements by 2010 – 65
- Assumptions - works three years beyond the year they are first eligible to retire



Mn/DOT Grad Engineer Hiring 1999 - 2006

Mn/DOT Graduate Engineer Program





Conclusions

- Graduated Feeder System Works
- Top Staff Involvement Essential/Report ability
- Changing Demographics are a Challenge
- Separate Budget for Grad Engineer Hiring
- Yearly Recruitment Level,
- Long Term Thinking and Ongoing Effort (Not a One Time Fix)
- Systems and Databases Necessary
- Questions?