



Engineering Workforce Readiness at JEA

Career Academy Business Partner Summit

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JEA Overview

- n 8th largest electric public utility in the nation
- n 2nd largest water/wastewater utility in Florida
- n JEA serves Duval and portions of Clay, Nassau, and St Johns Counties in Northeast Florida
- n *Electric System*
 - >400,000 electric customers
- n *Water and Sewer Systems*
 - >300,000 water customers
 - >200,000 sewer customers



The Utility Industry Workforce Challenge

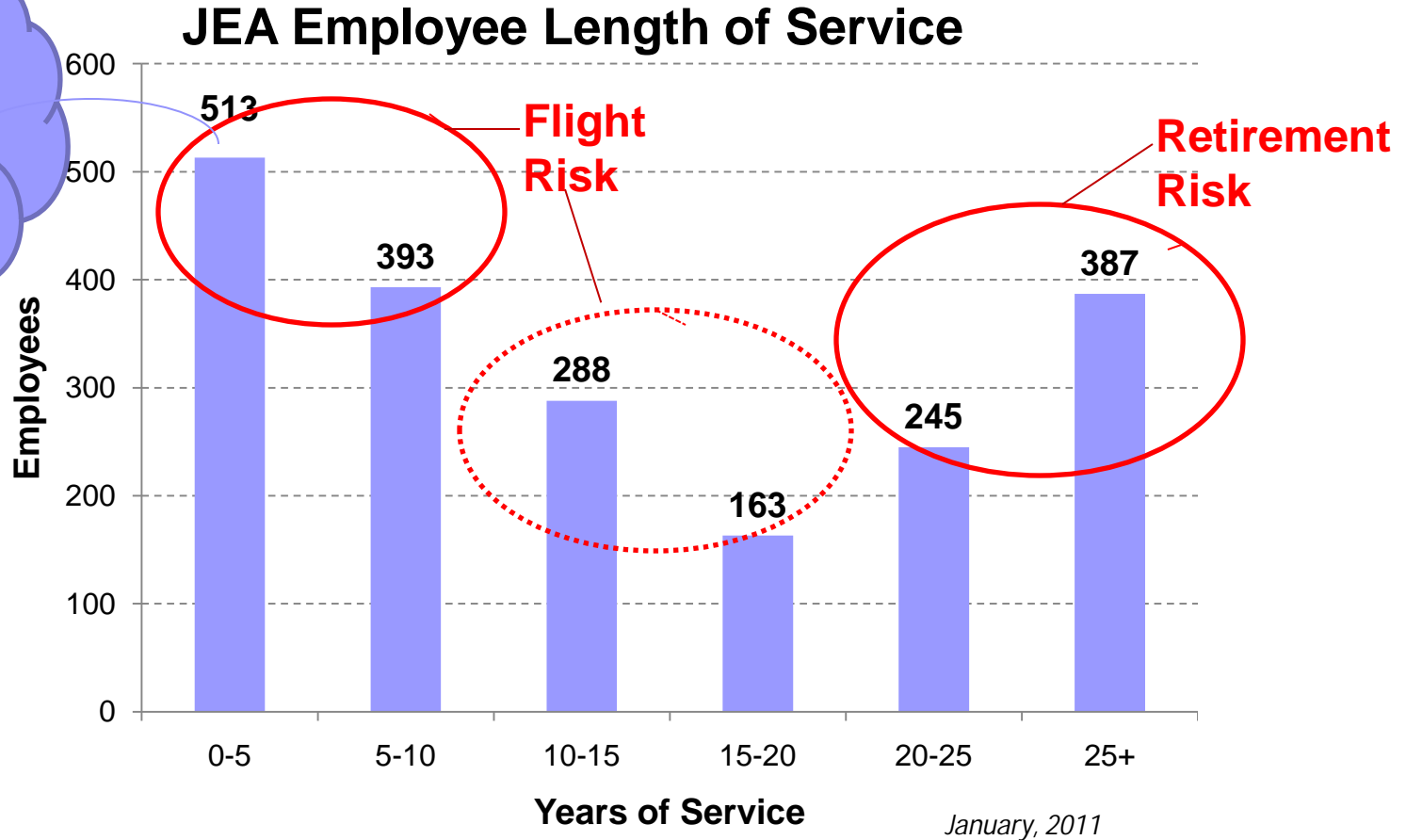
- n Average utility employee is 48 years old
- n ~51% of the engineering workforce in the Energy sector will need replaced by 2015 (16,400 engineers)
- n 3 Key concerns: aging workforce, skill gaps in talent pool, and changing energy technology
- n Relatively long training period due to complexity of jobs...and it's getting more complex every day
- n Demand is expected to outpace supply over the next decade

Other Points of Interest

- n Number of engineering graduates nationally declining ~ 20% reduction in last 15 years
- n Demand for qualified workers in all industrial sectors to rise significantly as baby boomers retire ~44% of America's workforce
- n Due to economic malaise, the competition for the limited engineering pool is temporarily subdued; however it's inevitable...the competition will return

JEA Attrition Risk Categories

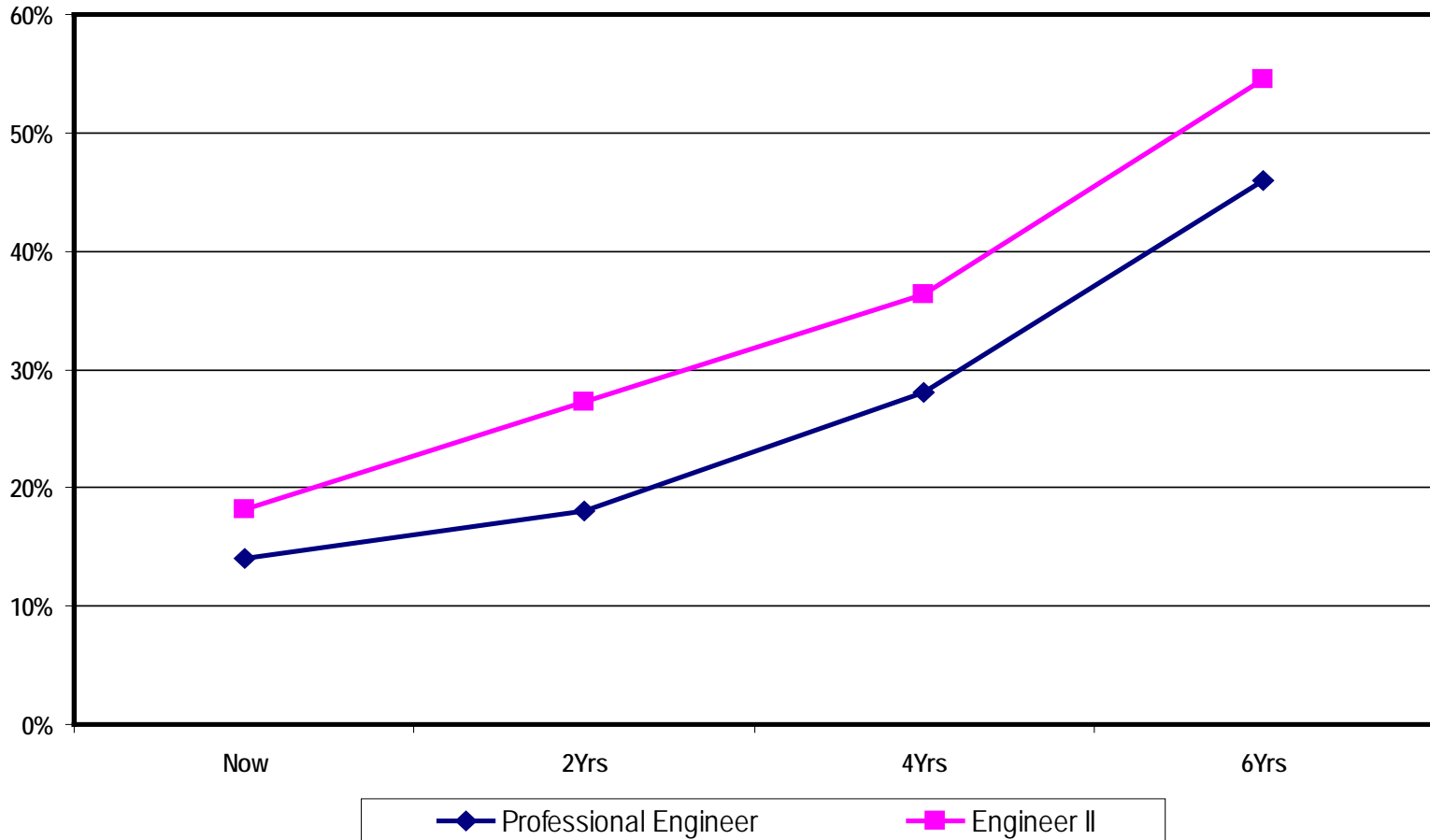
Hiring on the rise last five years



The retirement eligibility of JEA's workforce today is ~32%; the workforce readiness strategy to replace the aging workforce is reflected in the hiring patterns of last 5 years

JEA Engineering Retirement Potential

Percent of Engineers Eligible to Retire



40% Retirement Potential in Next 5 Years

Identified Vulnerabilities

n Engineering

- .. Bulk Power
- .. Combustion turbine
- .. Distribution
- .. Fuels
- .. Planning
- .. Power plant
- .. Relay
- .. Standards
- .. Transmission
- .. Water & Sewer

n Skilled Craft

- .. Line Maintainer
- .. Water/wastewater
 - n Coordinator
 - n Maintainer
 - n Mechanic
 - n Operator
 - n Planner
 - n Scheduler

n Technology

- .. Security

Engineering Pipeline

- n Pursuing “Grow our own” approach- new Engineering Employee Development Program
- n Implemented co-op program as feeder
- n Evaluating options for expedited knowledge transfer: job shadowing/ focused mentoring
- n Specialized recruitment required for mid-level expertise

Ideal Engineer Attributes

- n Strong math and critical analytical skills
- n Competent in discipline and adaptable to apply knowledge to alternative systems
- n Technical proficiency complemented with persuasive business case development
- n Bigger picture view matched with ability to “connect the dots”
- n Bonus points for emotional intelligence!

Partnerships & Programs

- n Regional/National Partnerships- Formed to help utilities work together to develop solutions to the coming workforce shortage in the utility industry
 - Center for Energy Workforce Development
 - Florida Energy Workforce Consortium
 - Florida's Water Future Employment & Workforce Subcommittee



Questions????