Planning in Large Personnel Systems: From the Military to Police Departments

Presentation for the 2008 National Summit on Police Recruitment and Retention
Military and Police

- Personnel Systems of the Military and Police Departments have a great deal in common
  - Market driven systems
  - Hierarchical, rank system
  - In-at-the-bottom, Up-through-the ranks
  - Competitive promotions
  - Time-grade/service pay systems by Rank
  - Early Retirement
  - Common Life Cycle
  - Traditionally, the military Services have more formally studied and planned to “shape” their forces to desired profiles.
    - Need to maintain an “optimal” age/experience profile to ensure readiness
Tradition of Personnel Planning in the Military

• In England
  – 1679: Secretary of the Admiralty regulates the annual entry of officers into the Royal Navy
  – 1779: Royal Marines managed career structures, retention rates, and promotion probabilities
  – 1814: Royal Navy “focus attention on some of the dangerous characteristics of the officer structure in the 1820s—age-blocks leading to promotion stagnation, lack of enough suitable posts in which to gain experience”
  – 1850: “full fledged even-flow entry, training, appointment, promotion and retirement policies and management practices”

• In the U.S.
  – 1899: “Personnel and Promotion Reduced to its Simplest Term,” in Naval Proceedings
  – 1916: Navy Personnel Act ends seniority system in Navy
  – 1970: Transition to All-Volunteer Force
Personnel Planning Needs Data and Tools

- **Data Achieve**
  - Defense Manpower Data Center established in 1973

- **Common tools for analysis of flows**
  - Rates can be calculated from personnel inventory data using flow models
  - Econometric analysis to determine what causes flows to change

Table 1

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<thead>
<tr>
<th>Year</th>
<th>Single Year Intent</th>
<th>Cumulative Intent</th>
<th>Non-Retired, &quot;Other&quot;</th>
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Fig. 7: Cumulative Probabilities of Service Elapsed Membership in One of Two Clusters.
Analyzing Life Cycle Events

- Military and Police personnel systems can be analyzed as a series of life cycle events
  - Zero-1 years of service (YOS): Accessions
    - “How do you get qualified people to want to join your organization; how do you select an appropriate job for them, train and assign them.”
  - 2 to 5 YOS: Probation and two sided learning
    - “Who do you want to stay, who do you want to leave?”
  - 5 to 15 YOS: Promotion
    - “Who do you advance to leadership positions; what do you do with those that do not advance?” How do you manage the lock-in caused by early retirement.
  - 20 YOS: Early Retirement
    - “Given early retirement, how to keep and motivate those you do not want to leave?”
  - 20 to 30 YOS: Senior Assignments and Retirement
    - “What do you do with senior officers and how do you maintain appropriate turnover in the force?”
Typical Personnel Years of Service Profiles: Life Cycle Events

COMPENSATION
ATTRACT, RETAIN AND MOTIVATE

Probation and Two Sided Learning

Promotion

Early Retirement

Senior Assignments and Retirement

Accession Programs

Years of Service

- 1 or less
- 2 to 5
- 6 to 10
- 11 to 15
- 16 to 20
- 21 to 25
- 26 to 30
- 30 or more

Army Enlisted
Typical Personnel Years of Service Profiles: Life Cycle Events

- COMPENSATION
  - ATTRACT, RETAIN AND MOTIVATE
- Probation and Two Sided Learning
- Promotion
- Early Retirement
- Senior Assignments and Retirement
- Accession Programs

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- Average Police
- Army Enlisted
Variation Across Departments Allows for Analysis of Determinants

Variation Among Police Departments

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Variation Among Police Departments Allows for Analysis of Determinants

Variation Among Police Departments

Years of Service

0.0% 5.0% 10.0% 15.0% 20.0% 25.0% 30.0% 35.0%

1 or less 2 to 5 6 to 10 11 to 15 16 to 20 21 to 25 26 to 30 30 or more

Average Police

1003 1005 1009 1019 1023 1031

R&R Summit -9 June-08
Variation Across Departments Allows for Analysis of Determinants

RETENTION\text{average} = \frac{\text{Sum}(\ldots)}{N}

Variation Among Police Departments

Years of Service

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Variation Across Departments Allows for Analysis of Determinants

Variation Among Police Departments

RETENTION = F(wages, promotions, working conditions)
What Impact Do Different Promotion Opportunities Have on Retention?

Distribution of Rank for Officers Between 6 and 10 Years of Service

Distribution of Rank for Officers Between 11 and 15 Years of Service
What Impact Do Different Promotion Opportunities Have on Retention?

**Distribution of Rank for Officers Between 6 and 10 Years of Service**

- Department 2 has a two tier officer grade system.
- Department 4 has earlier promotions to Lieutenant.
Examples of problems in the military and how personnel research helped solve them.
Is it feasible to move to an all-volunteer force and, if so, how much would it cost?

Aggregate enlistment supply curve

- \( N \) = number of eligibles who would enlist
- \( P \) = number of potential enlistees

\[ (N, M_0) \quad (P, M_1) \]

Expected military return
Does having a high-quality force really matter?

![Bar chart showing predicted tactically correct kills by AFQT category.

<table>
<thead>
<tr>
<th>Category</th>
<th>Kills</th>
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<tbody>
<tr>
<td>Cat I</td>
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<tr>
<td>Cat II</td>
<td>50.7</td>
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<tr>
<td>Cat IIIA</td>
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<tr>
<td>Cat IIIB</td>
<td>44.9</td>
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<tr>
<td>Cat IV</td>
<td>41.9</td>
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Does having a high-quality force really matter?

<table>
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<tr>
<th>AFQT Category</th>
<th>Predicted Tactically Correct Kills</th>
<th>Predicted Missiles Used for Ten Tactically Correct Kills</th>
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How can we build a high-quality force?

Educational Assistance Test Design

- Control 52%
- Benefit A 18%
- Benefit B 15%
- Benefit C 15%
Results of Research for the 9th QRMC: Pay for Senior Enlisted Personnel Increased

Regular Military Compensation of Enlistees Compared to Civilian Earnings (2000 dollars)

High School Graduates

Individuals with Some College Education

Higher pay resulted in high retention during Operation Iraqi Freedom
Current Research Addresses Ways for the Army to Improve Recruiting

The Army recruits personnel from an older group
Insights from Military Research to Practical Police Problems

RAND’s Recommendations based on applying military research to NOPD’s personnel profile included:
- Better entry pay
- Pay increases during first five years of service
- Retirement reform
- Career progression & promotion timing
- Professionalization of recruiting
- Police cadet program
- Use of civilians
Further Insights from ...

• Colonel Daniel J. Choike, USMC
  – Chief of Staff, Marine Corps Recruiting Command
  – Recruiting Operations

• Lt. Colonel Michael Zeliff
  – Marketing and Advertising