Women in Transportation Field Jobs: The Hidden Asset

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Photo: Daniel Rust
Overview

- To date, transportation field jobs/operational positions remain male-dominated

- These jobs include:
  - Freight railroad train crews (locomotive engineers, conductors, brakepersons) and maintenance of way personnel
  - Over-the-road truck drivers
  - Towboat pilots and barge deckhands
  - Shuttle bus/van operators
Overview

- The transportation industry currently faces a shortage of qualified applicants for operations roles.
- This project contends that the female labor force is an underutilized asset that transportation companies should consider when hiring.
- By making appropriate accommodations as necessary, transportation companies will likely find that women can fill many traditionally male-dominated operational positions.
  - Examples of emergency responders and military
Project Goals

- Conduct literature review of historic and current trends related to topic of women in transportation field jobs
- Compile current demographic data for female population and trends in operational, traditionally male-dominated roles in rail, trucking, barge, and shuttle bus industries
- Use surveys to explore reasons why women do not occupy more positions within these operational roles
Project Goals, cont.

- Present an action plan to influence an increase in the female population within operational roles in the transportation industry
The four industries with the largest percentage of total employed women in 2013 were:

**Education and Health Services industry - 36.2%**

**Wholesale and Retail Trade Industry - 13.1%**

**Professional and Business Services industry - 10.5%**

**Leisure and Hospitality industry - 10.3%**

The four industries with the smallest percentage of total employed women in 2013 were:

- **Mining, Quarrying, and Oil and Gas Extraction industry - 0.2%.**
- **Construction industry - 1.3%.**
- **Information industry - 1.7%.**
- **Transportation and Utilities industry - 2.6%.**

Historical Background

- Transportation operations positions have been historically male-dominated—Why?
  - Nature of the work
    - Long hours, physical demands, dangerous
  - Unionization
  - Tradition
- Change started during the First and Second World Wars

Photo: http://carolinanaturally.blogspot.com/2012_08_22_archive.html
World War One

- Federalization of railroads in 1917 and the wartime labor shortage led to hiring large numbers of women for railroad work.

- By October 1918, more than 101,000 women working for US Railroad Administration.
  - Vast majority in traditional jobs for women.

<table>
<thead>
<tr>
<th>Class of Employees</th>
<th>Women Employed by Railroads, October 1, 1918</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clerical or semi-clerical</td>
<td>73,285</td>
</tr>
<tr>
<td>Cleaning/Shopwork</td>
<td>10,646</td>
</tr>
<tr>
<td>Personal Service and Attendants</td>
<td>5,156</td>
</tr>
<tr>
<td>Telegraph or Telephone Operator</td>
<td>5,019</td>
</tr>
<tr>
<td>Warehouse/docks (including truck drivers)</td>
<td>1,461</td>
</tr>
<tr>
<td>Roundhouse Work</td>
<td>1,365</td>
</tr>
<tr>
<td>Track Work</td>
<td>872</td>
</tr>
<tr>
<td>Train Service</td>
<td>100</td>
</tr>
</tbody>
</table>

World War Two

- Approximately 40,000 women working for railroads at start of war
  - Mostly clerical workers, many stewardesses
- By war’s end, 116,000 women worked for railroads in US
  - Classified as “temporary” employees
  - Over 3,000 maintenance of way women workers at Class 1 railroads by 1945
  - American Council of Railroad Women founded in 1944

Dorothy Lucke, employed as wiper at Chicago & Northwestern Railroad, circa 1943

Railroad Revitalization and Regulatory Reform Act of 1976

- Contained non-discrimination clause and mandate for affirmative action to remove or overcome the effects of the prior discriminatory practice or usage
- Forced open door for women to become locomotive engineers and conductors

Christene Gonzales (age 22), first engineer on Santa Fe Railroad, 1976

Photo: https://www.friendsofbnsf.com/content/first-female-engineer-atsf-reflects-road-less-traveled
Female Truck Drivers

- 1929, Lillie McGee Drennan became first woman to earn commercial driver’s license
- Unions attempted to keep women out of industry, but by late 1970s, there were nearly 25,000 female long-haul drivers

Sandi Talbott has driven more than 4 million miles as OTR semi-truck driver since late 1970s

# Labor Force Statistics from Current Population Survey

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Total Employed in 2014</th>
<th>Women (Percent of total employed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driver/sales workers and truck drivers</td>
<td>3,406,000</td>
<td>5.8</td>
</tr>
<tr>
<td>Industrial truck and tractor operators</td>
<td>564,000</td>
<td>7.4</td>
</tr>
<tr>
<td>Locomotive engineers and operators</td>
<td>55,000</td>
<td>1.4</td>
</tr>
</tbody>
</table>


Note: Less than 10% of shuttle van/bus industry operators are women, and there are no available statistics of how many females are employed as barge pilots or deckhands.
## Women Employees at Largest North American Railroads

<table>
<thead>
<tr>
<th>Railroad</th>
<th>Women as Percentage of Total Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Union Pacific</td>
<td>6% (17% of upper management)</td>
</tr>
<tr>
<td>BNSF</td>
<td>7%</td>
</tr>
<tr>
<td>CSX</td>
<td>7% (1% in train and engine positions)</td>
</tr>
<tr>
<td>Norfolk Southern</td>
<td>7%</td>
</tr>
<tr>
<td>CN</td>
<td>10% (mostly in support roles and administration)</td>
</tr>
<tr>
<td>Amtrak</td>
<td>23%</td>
</tr>
</tbody>
</table>

Current Status of Research Project

- Pilot surveys currently under evaluation by select female employees of Union Pacific Railroad and SuperShuttle
- Anticipate wide distribution to female employees throughout companies in both rail and shuttle bus industries
- Survey of female truck drivers and barge industry workers to follow
Obstacles to Recruiting and Retaining Female Employees in Transportation Field Jobs

- Tradition
- Stigma of being a woman doing a “man’s job”
- Physical nature of tasks
- Lack of information about potential careers
- Workplace harassment
- Physical accommodations
- Nepotism
- Scheduling demands and unpredictability
- Lack of opportunity for advancement
- Etc.
Action Plan

- To address main question: What can industry do attract and retain more female workers?
- Follow-on phase of project to examine railroad industry practice of using the “extra board” for scheduling in light of current demographics and trends

Sarah Schmidt, a locomotive engineer at Union Pacific Railroad

Photo: http://realfall2011.dctc.edu/2011/11/05/running-at-speed/