

# Pivotal Decision Points in Student Veterans' Education Life-Cycle: Initial Findings from SVA's Decisions Tree Project

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SVA 10<sup>th</sup> Annual National Conference | San Antonio, TX | January 5, 2018

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THE SATURDAY EVENING  
**POST**

OCTOBER 5, 1946

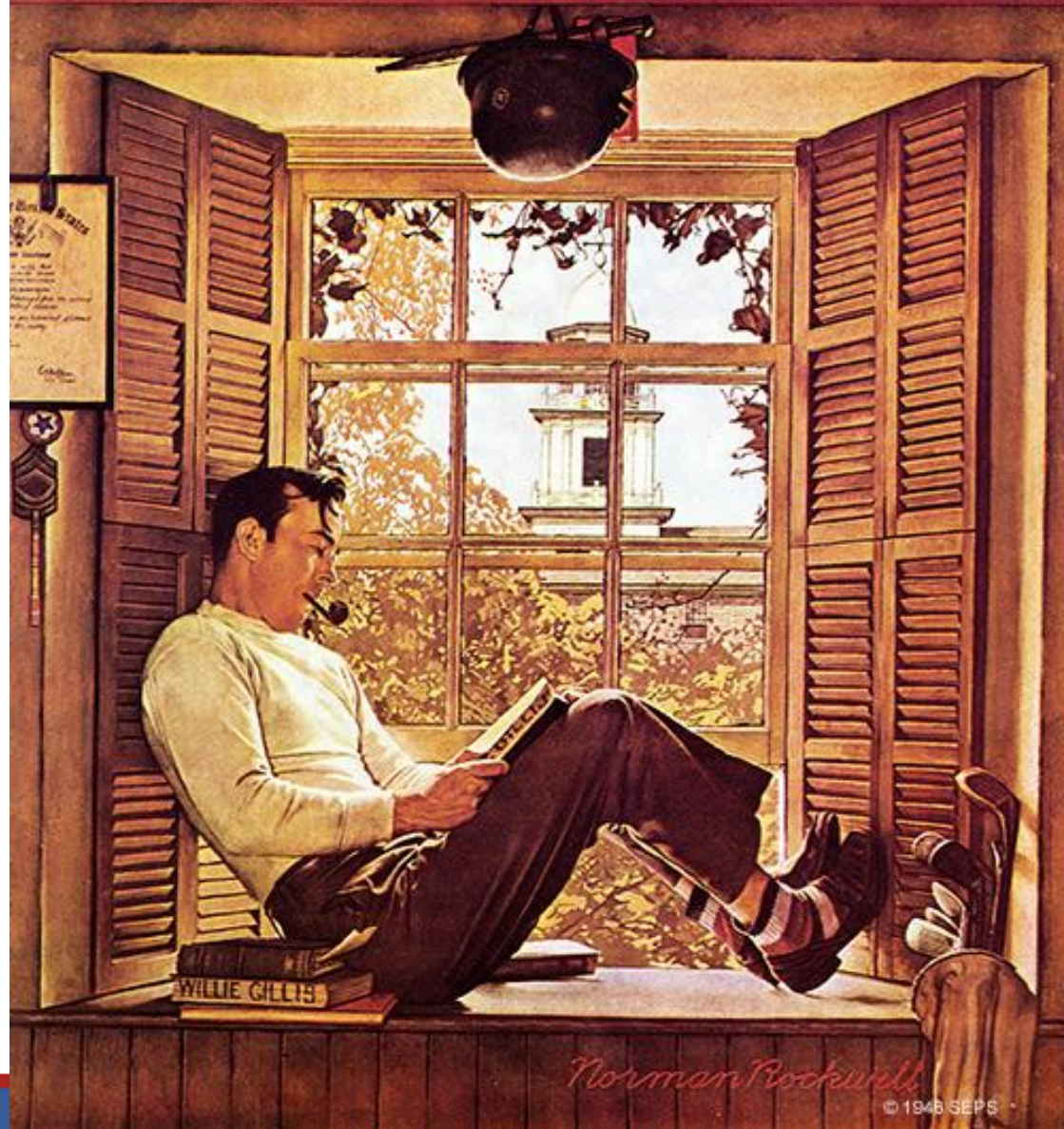
10¢

**THE CASE OF  
ERLE STANLEY GARDNER**

By ALVA JOHNSTON

**WASHINGTON, D.C.**

By GEORGE SESSIONS PERRY



*Norman Rockwell*

© 1948 SEPS

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graph LR; A[Military Service] --> B[College]; B --> C[Workforce];
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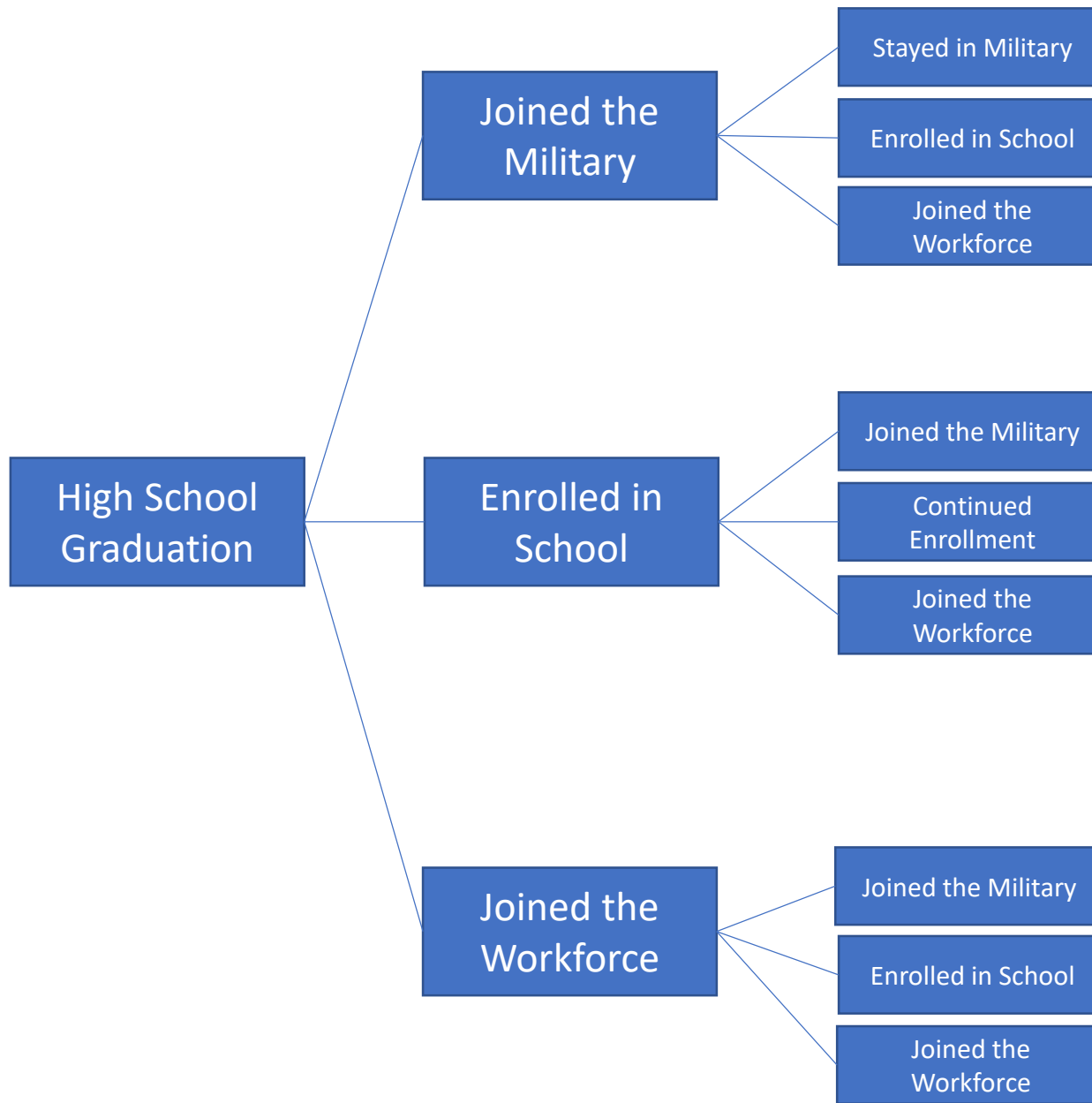
Military  
Service

College

Workforce







# Student Veteran Life Cycle Atlas

- To learn more about how key decision points connect to various educational and employment outcomes.
- Analyzing the education lifecycle of student veterans, the project discovers key decisions points and the different outcomes from those decisions.
- The result will presented as an interactive diagram illustrating pivotal student veteran decisions to, through, and beyond college.
- The goal is to provide veterans, at any point in their educational lifecycle, facing a decision, an instrument to explore and evaluate different outcomes based on previous student veterans' experiences.

# A little about the pilot sample...

- Pilot data gathered in the Fall/Winter of 2017
- Recruitment consisted of sending an email to student veterans
- Inclusion criteria for pilot:
  - Current or former military service
  - Current or formerly enrolled in post-secondary program
  - Participated in in SVA programming or training in the last three months or registered for programming in the next three months.
- If you stated you were a veteran and registered for NatCon by December 1<sup>st</sup>, you were sent an email.



# A little about the data...

- Descriptive statistic analyses were based off of 330 responses to the pilot release of The SVA Student Veteran Lifecycle Atlas
- Decision tree analyses were based off of 129 respondents that indicated at least three decision points in their lifecycle so far.

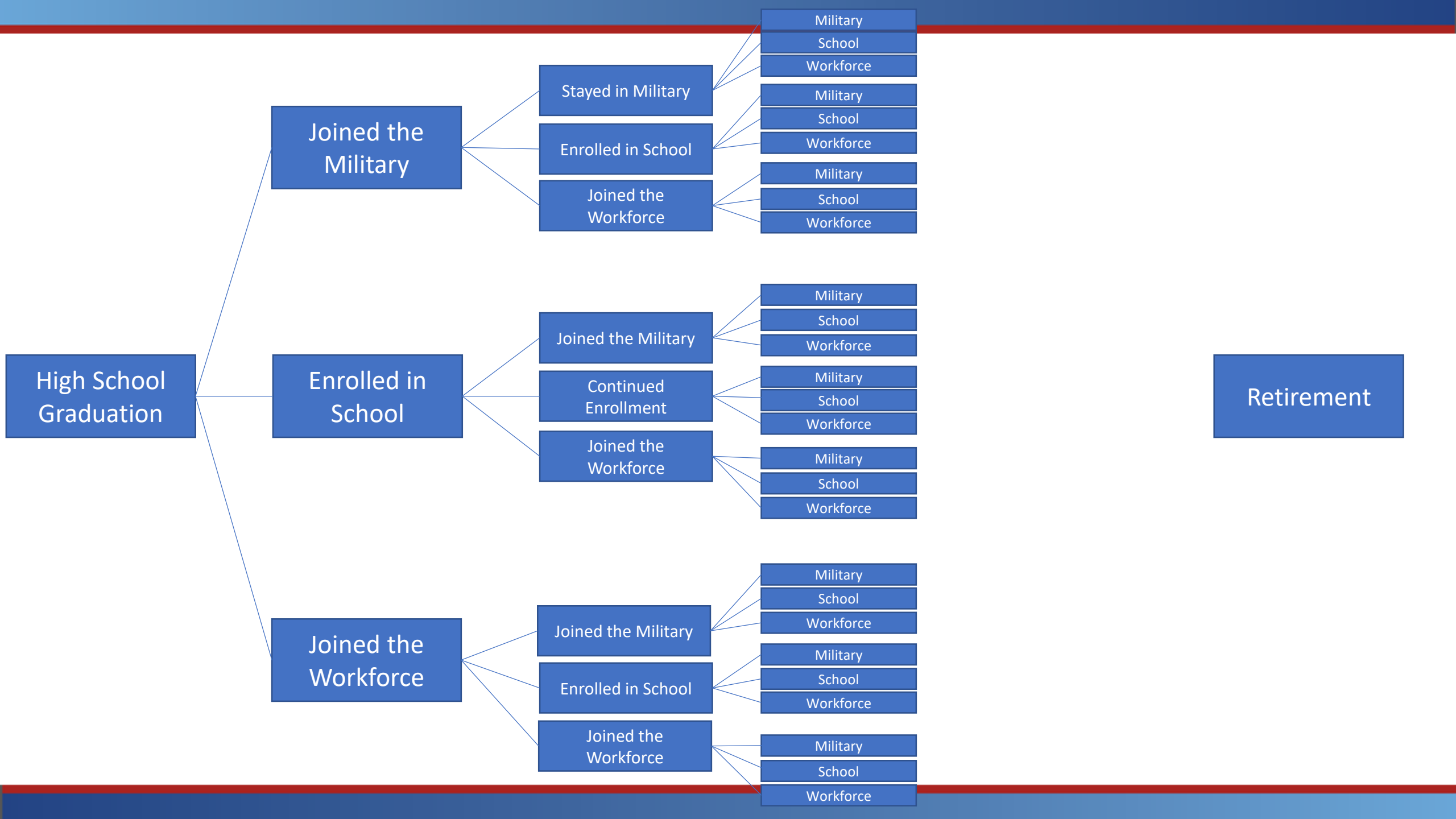
# A little bit about decision trees...

- A decision tree is a supervised learning algorithm that uses a tree-like graph or model of decisions and their possible consequences. These decision points are considered roots (also called nodes).
- The current analyses uses a classification method decision tree.

# Descriptive Statistics

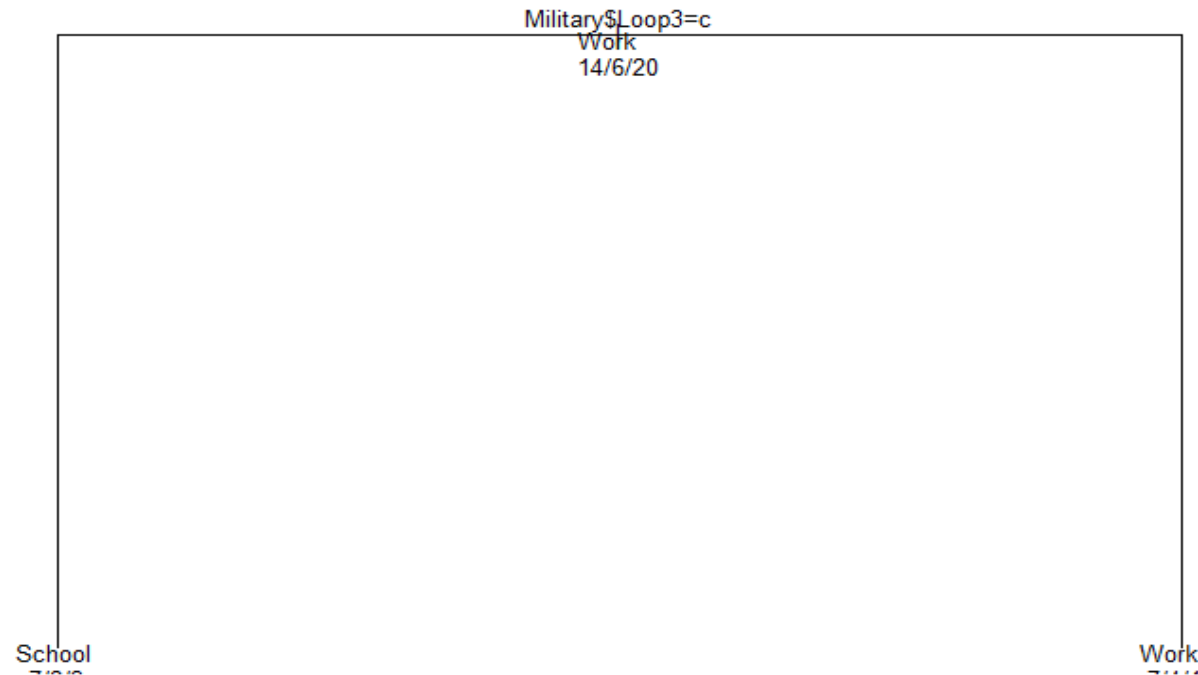
What is your current age?	
Minimum	21
Maximum	76
Mean	37.63
Median	34
Mode	29 & 33

Which best describes your gender identity		
Female/Woman	85	32.57%
Male/Man	173	66.28%
Other, not listed	2	0.77%
Transgender Male/Man	1	0.38%
Total	261	100.00%

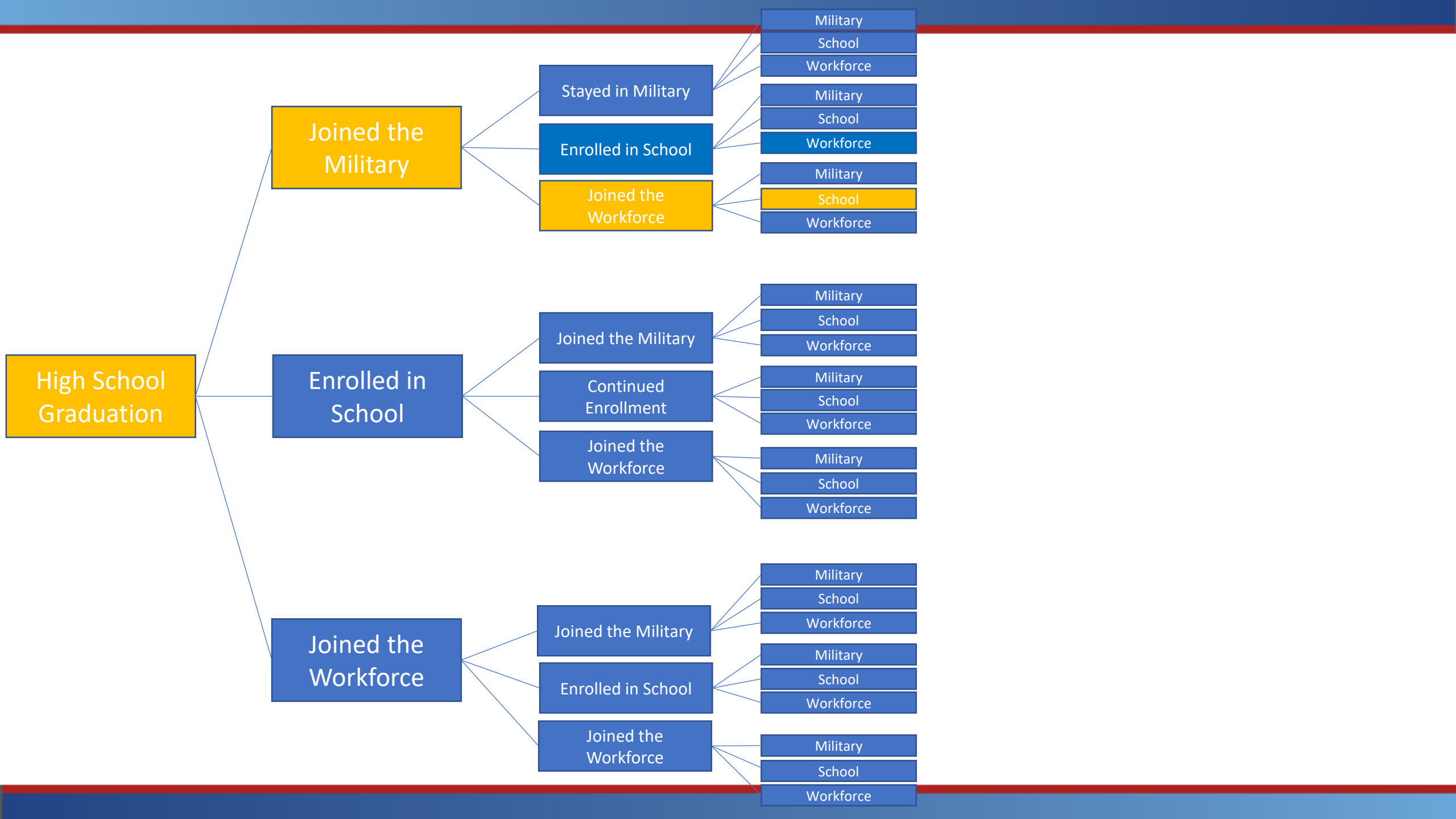


Those who joined the military immediately after high school were most likely to then enter into the workforce, then enroll in school.

### Classification Tree for Lifecycle

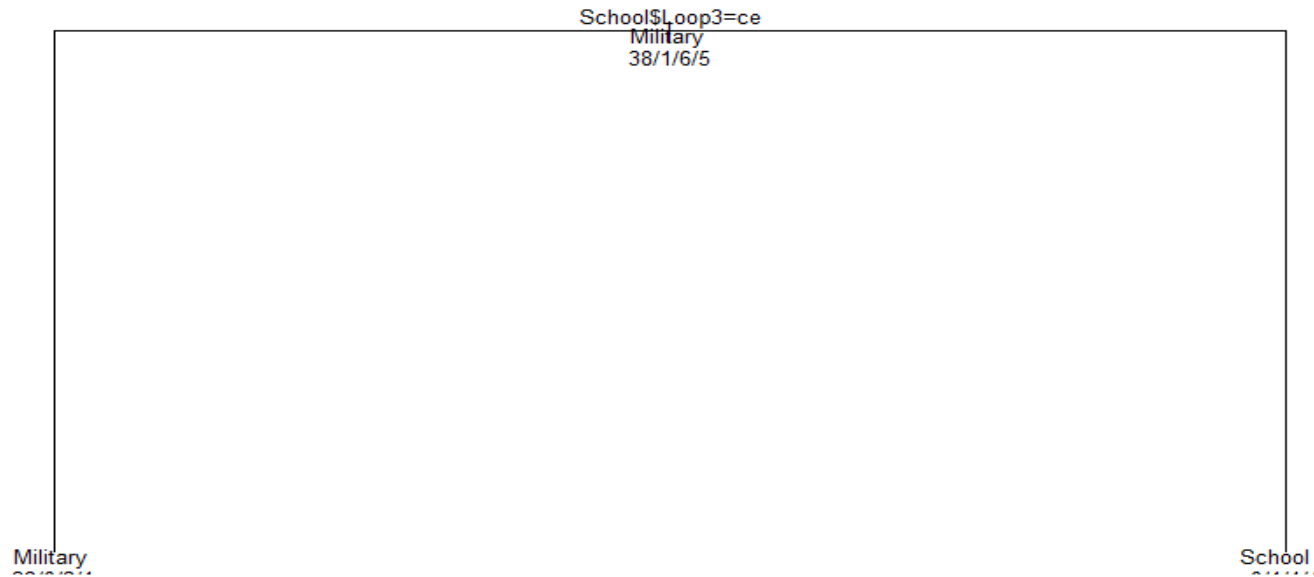


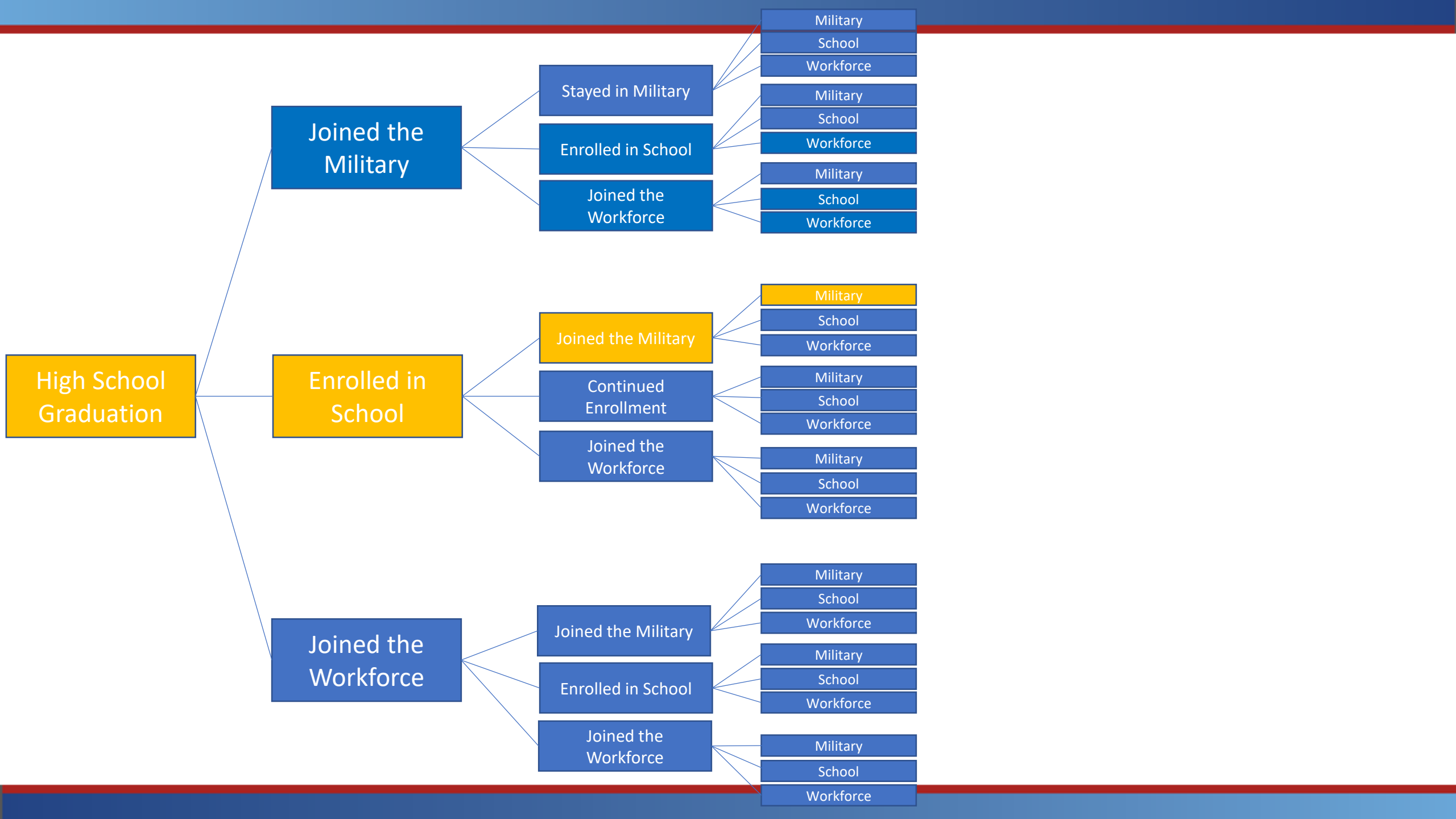




Those who enrolled in postsecondary education immediately following high school graduation were more likely to next join the military and continue their career in the military.

Classification Tree for Lifecycle





# Those who entered the workforce immediately following high school graduation....

- Our sample size for this group was not large enough to reach any significant results regarding these individual's paths.

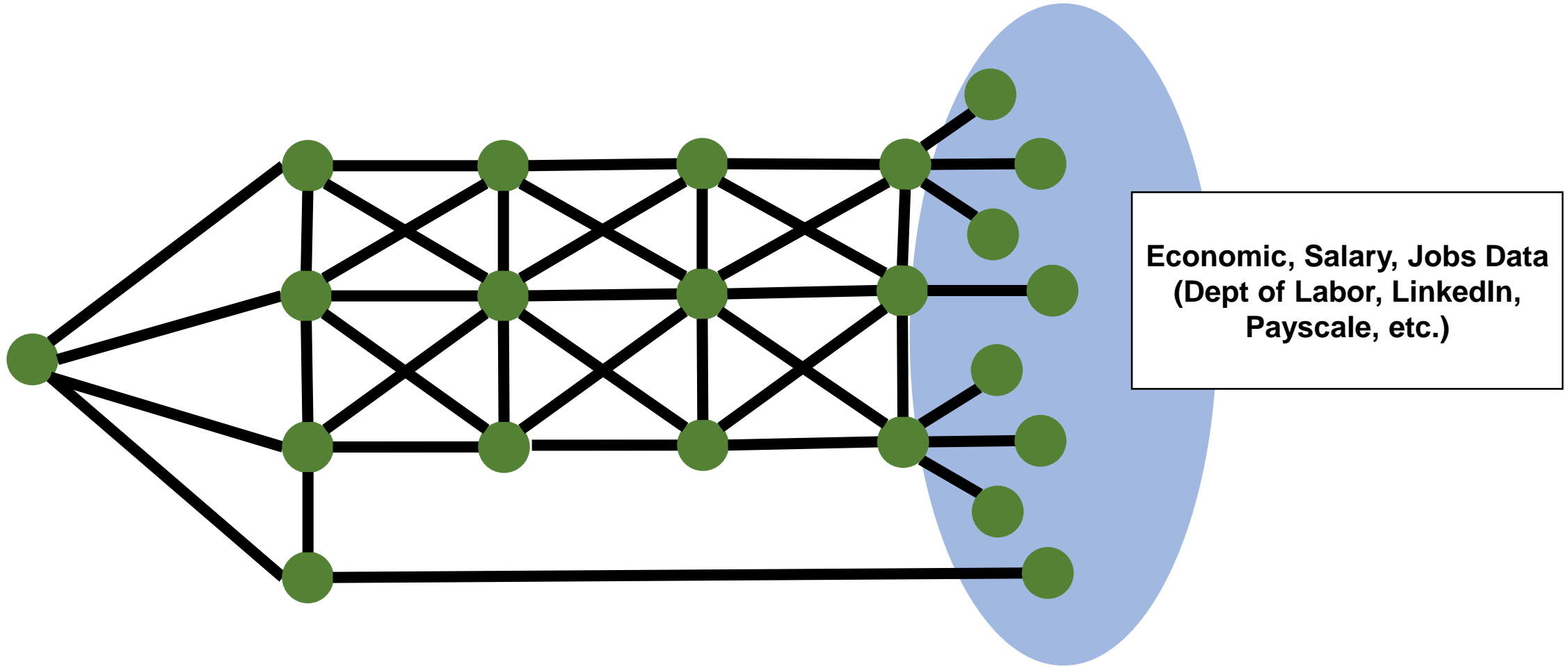
```
Error in plot.rpart(fit, uniform = TRUE, main = "Classification Tree for Lifecycle") :  
fit is not a tree, just a root
```

# Key Finding

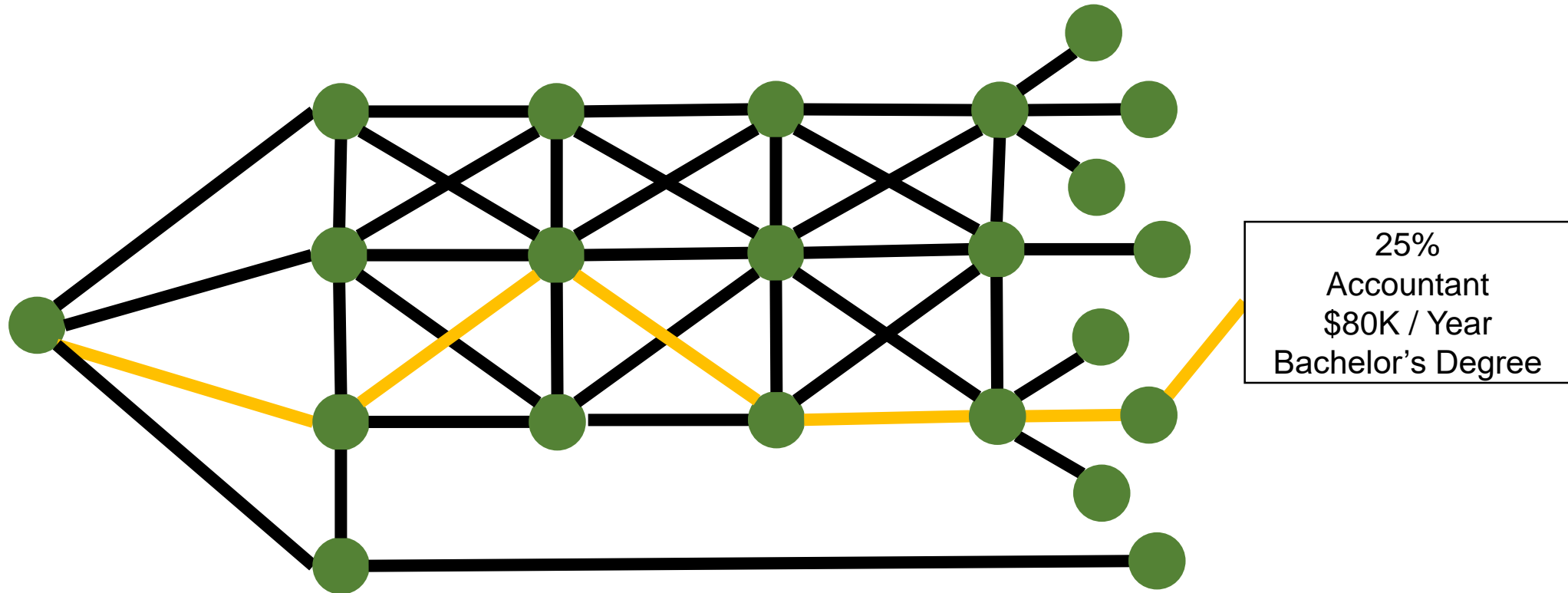
- The analysis confirmed that the method is appropriate.
- Pilot sample was fairly similar with similar paths and the analysis showed that.
- When recruitment expands to a wider sample more maps with different paths will develop.



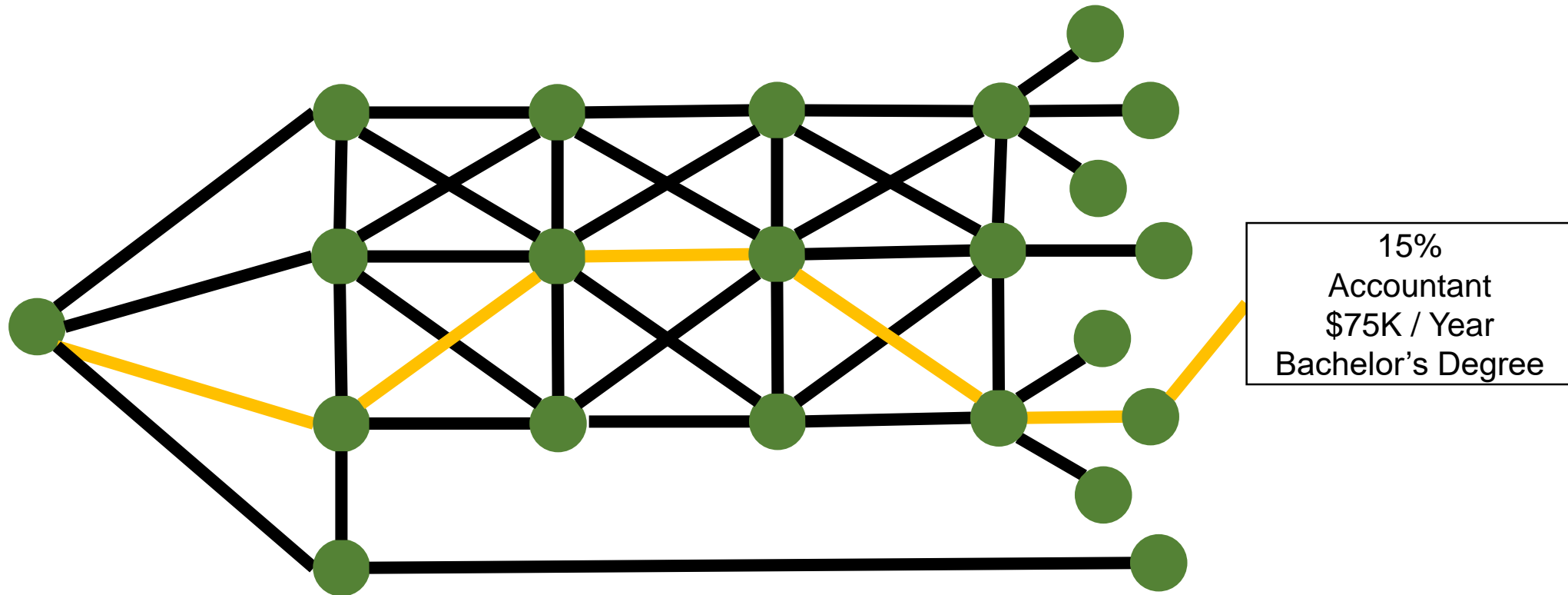
# The Future



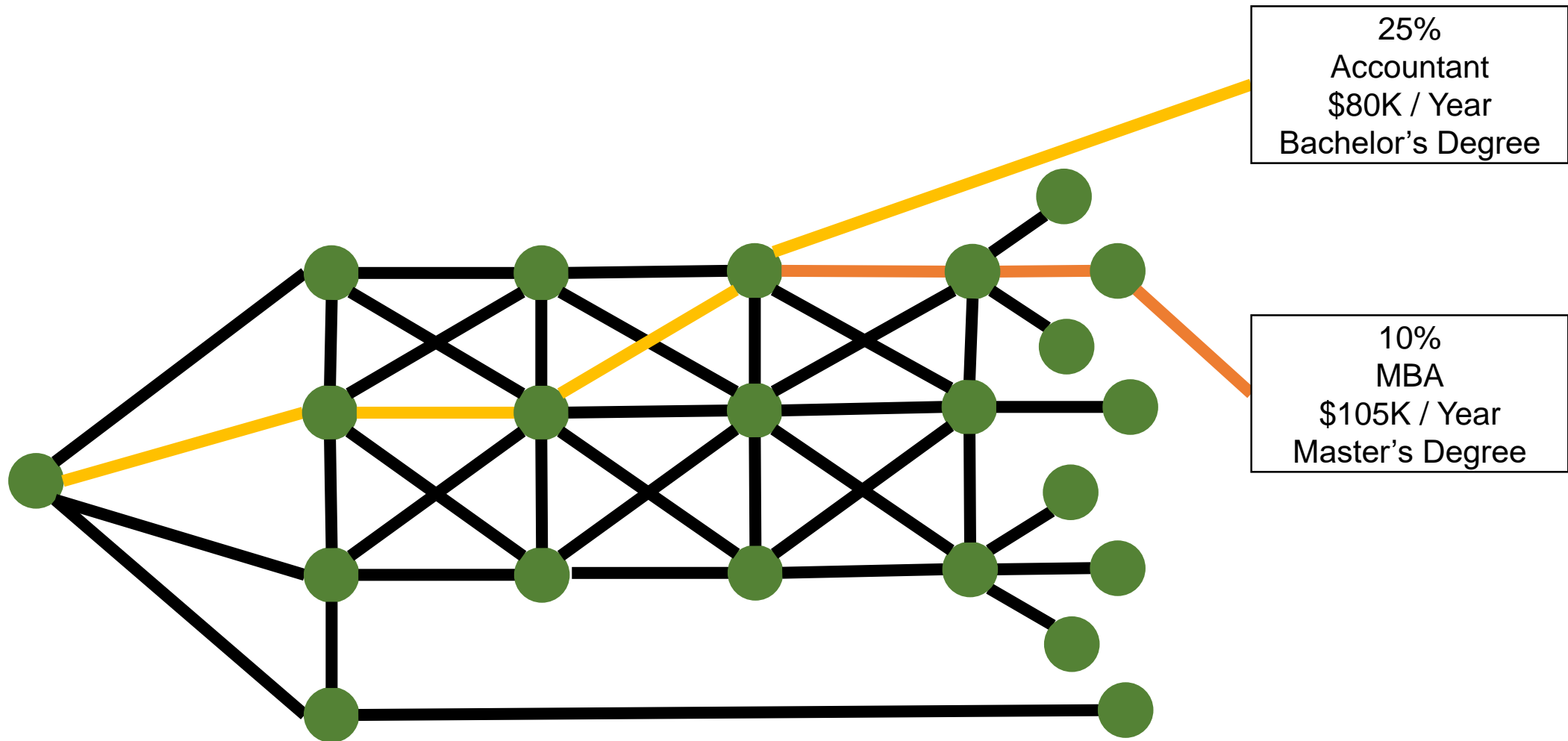
# Path Exploration



# Path Exploration

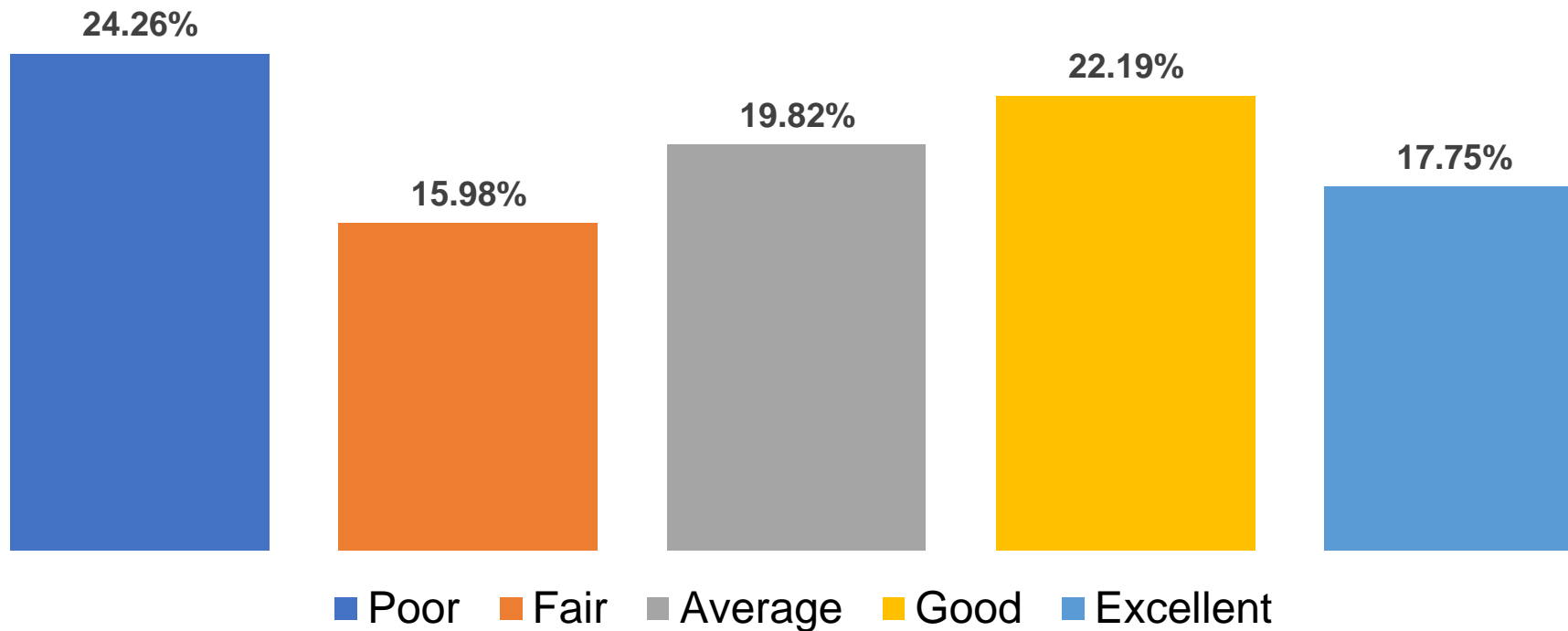


# Not Just for Transitioning Service Member



# Other Data Points

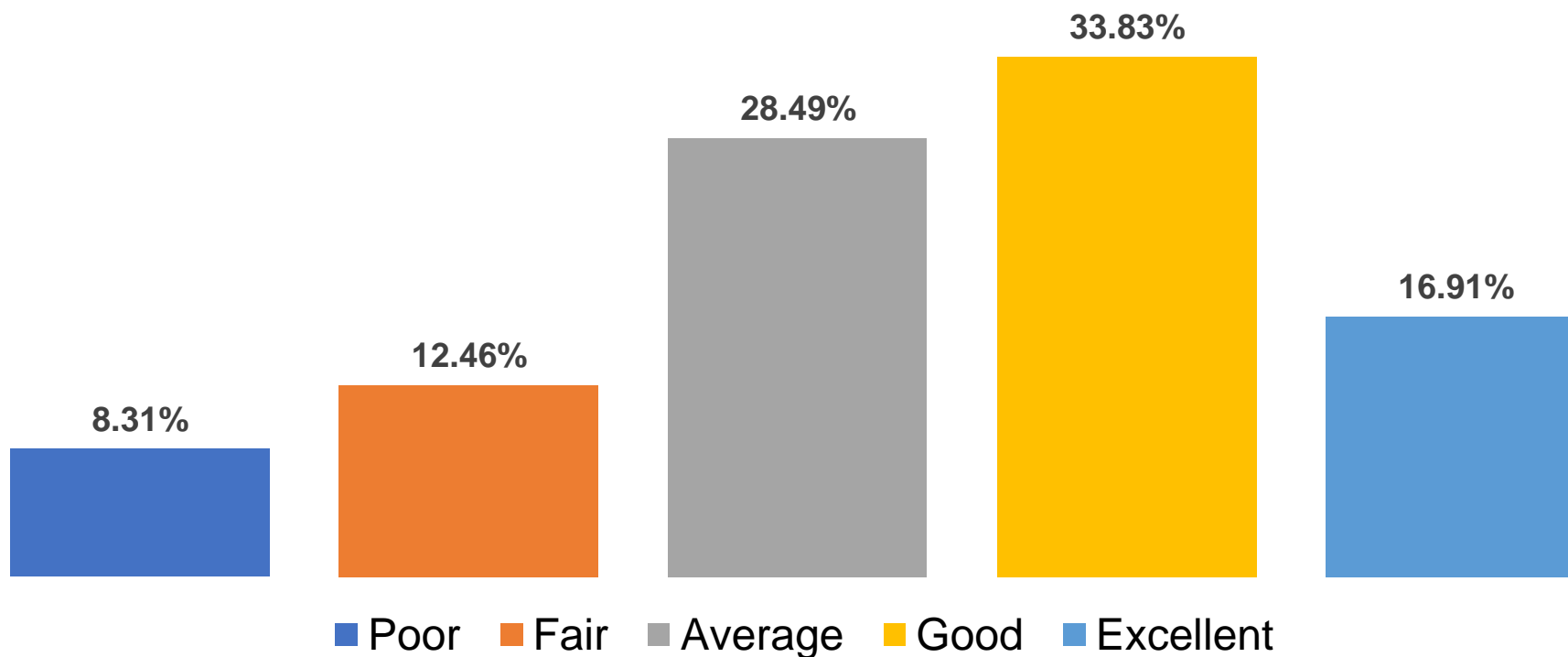
**In High School, How Would You Rate Your College Prospects?**





# Other Data Points

**In High School, How Would You Rate Your Grades?**



# What was your primary reason for joining the military?

Patriotism, defending our nation, a sense of duty	26.32
Chance for a better economic future	10.96
Veteran/Military education benefits	10.96
Family tradition of military service	8.33
Personal improvement	7.89
Path out of living situation / neighborhood	7.02
Was not prepared for college/university	7.02
Opportunity to learn new skills and training	5.70
No other life options at the time	5.26

# Timeline

- Expand recruitment
- Develop the interactive data visual
- Update model (monthly)
- Annual map updates
- Report on findings

# Contact Info



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