

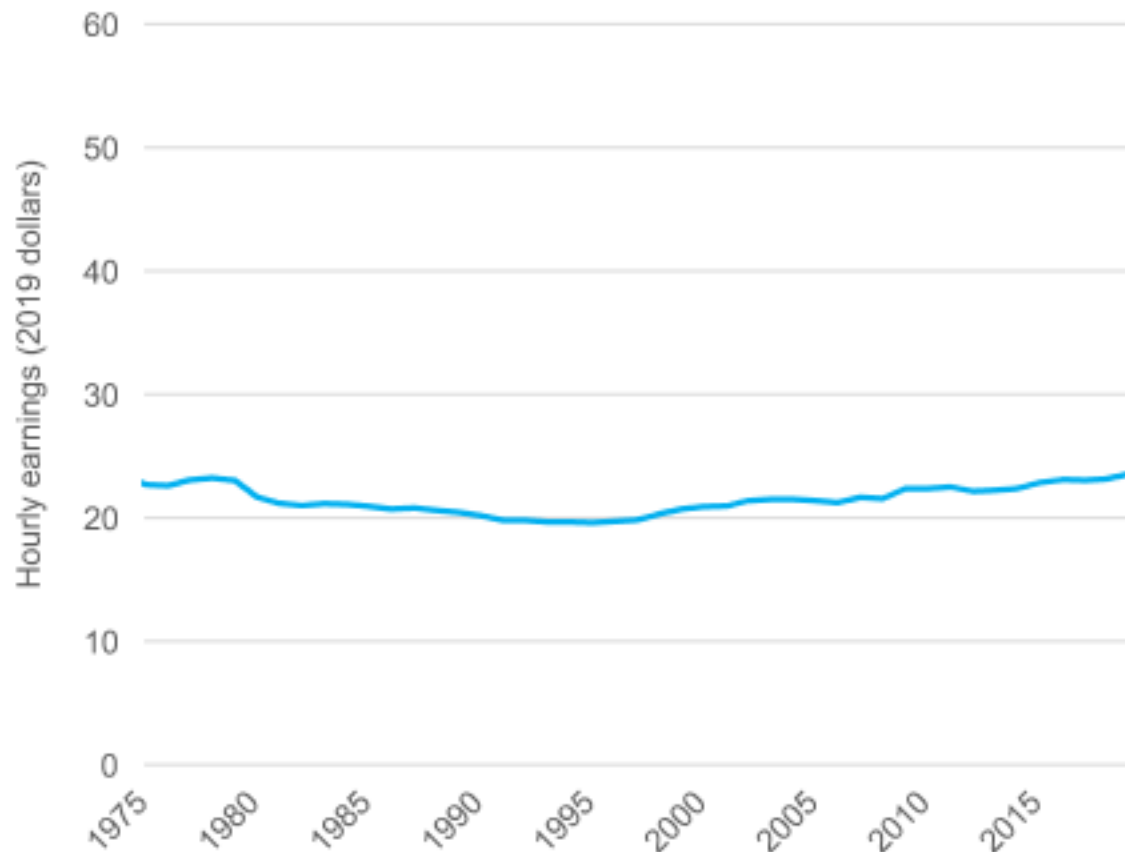
FUTURE OF WORK

Alastair Fitzpayne, Executive Director
Aspen Institute Future of Work Initiative

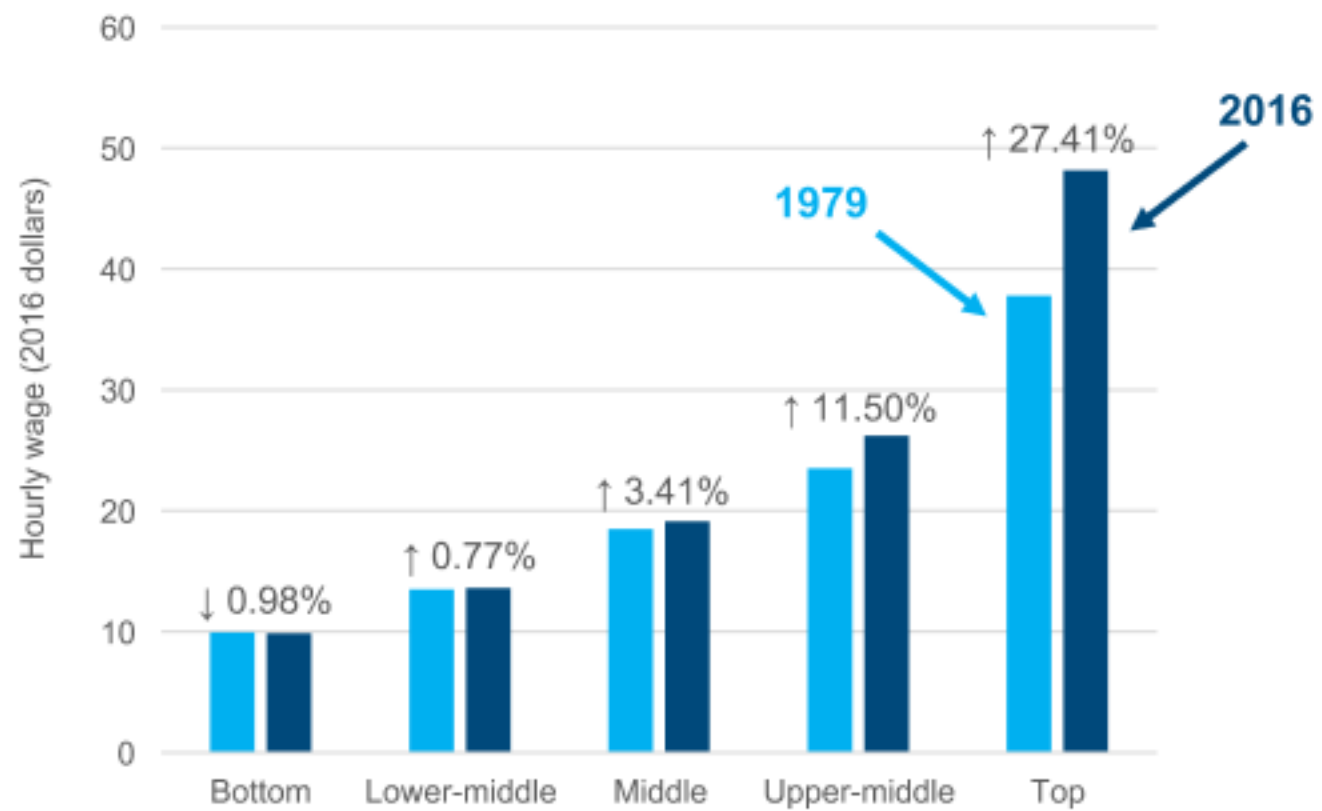
September 27, 2019

LONG-TERM WAGE STAGNATION

REAL AVERAGE HOURLY EARNINGS,
1975-2019



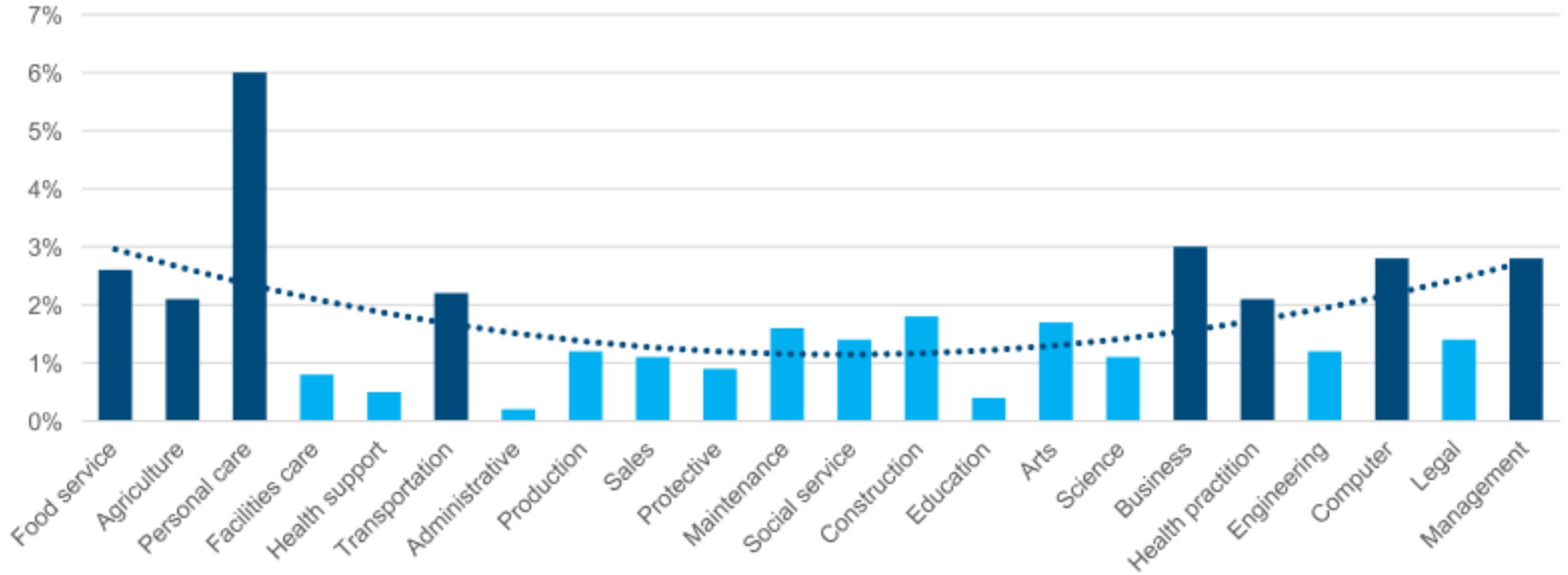
REAL WAGES BY WAGE QUINTILE,
1979 & 2016



DECLINE OF MIDDLE-WAGE WORK

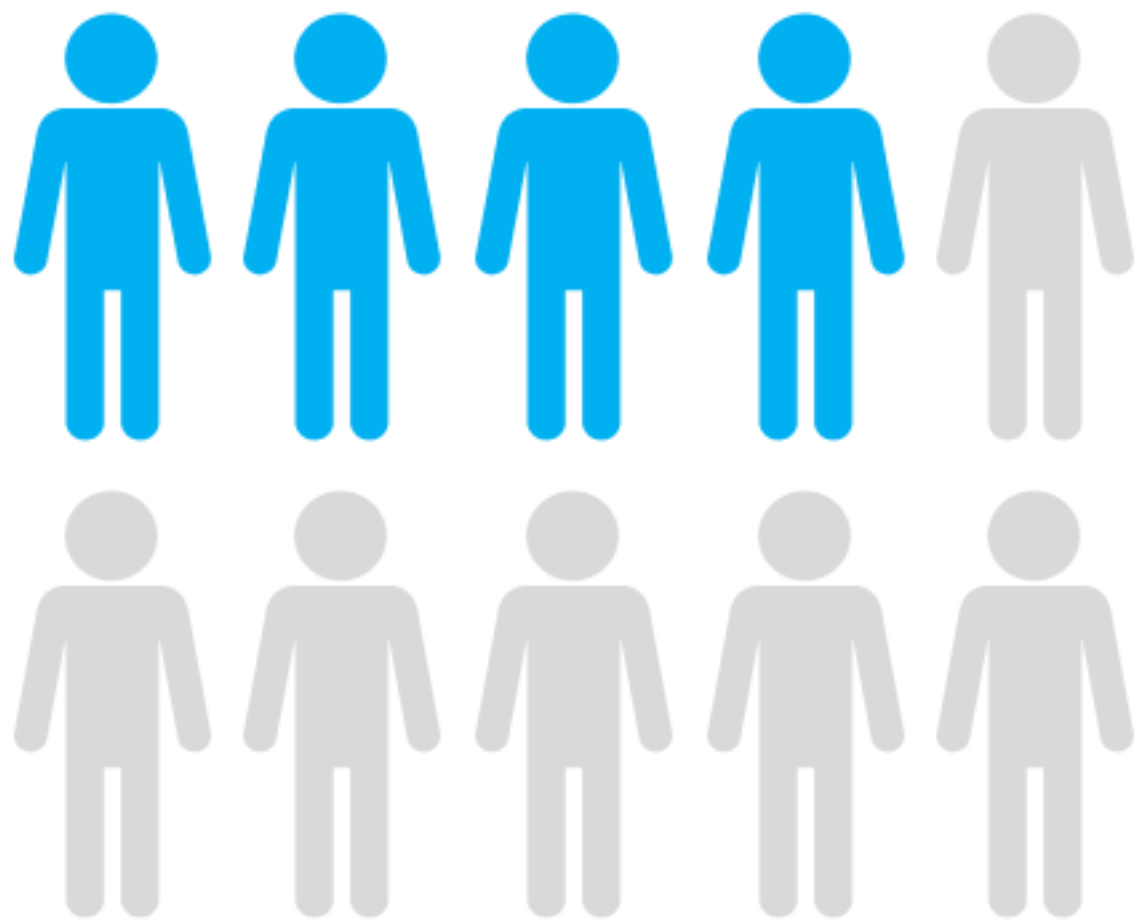
EMPLOYMENT COMPOUND ANNUAL GROWTH RATE
2010-2017

Higher average wages



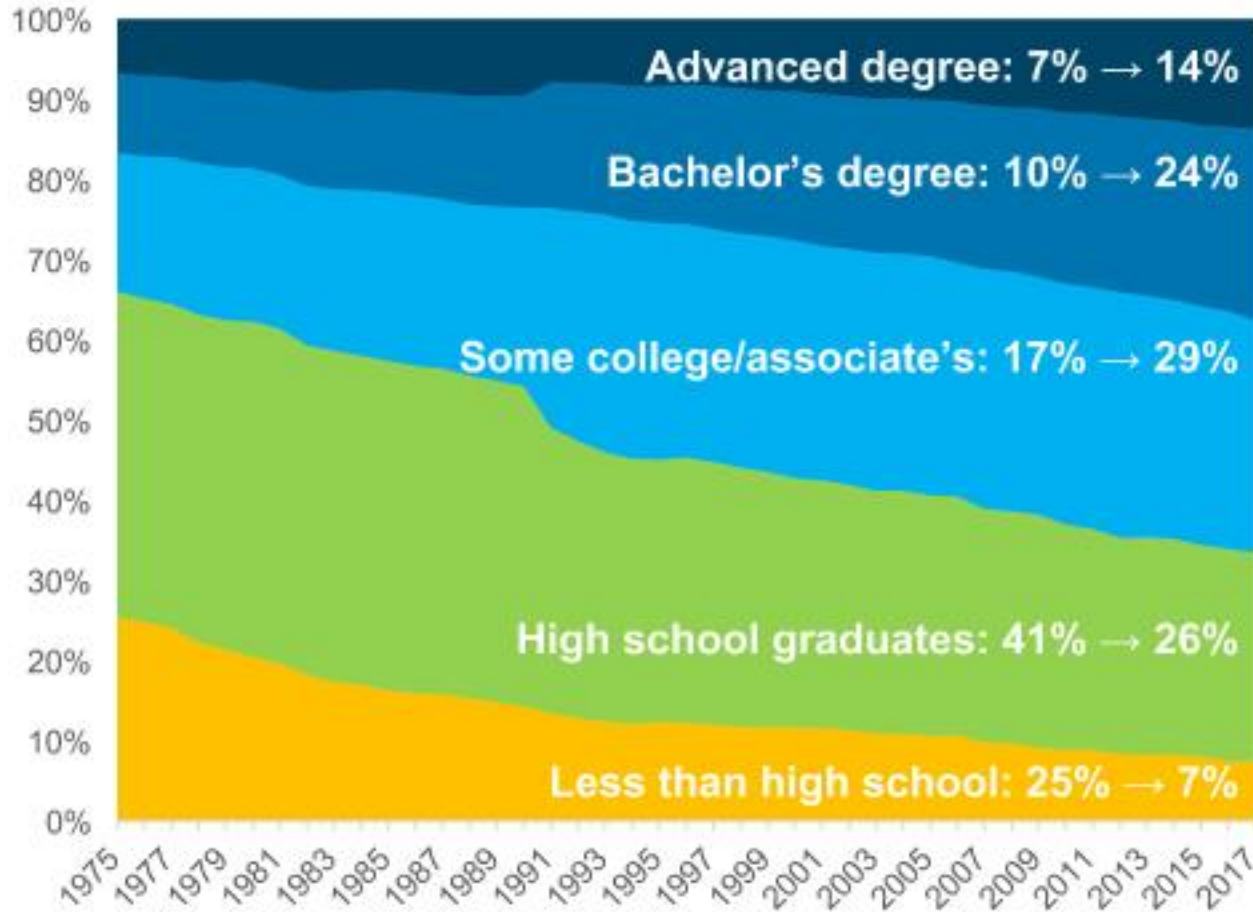
FINANCIAL INSECURITY

FOUR IN TEN
ADULTS REPORT
NOT BEING ABLE TO
AFFORD AN
EMERGENCY
EXPENSE OF **\$400**

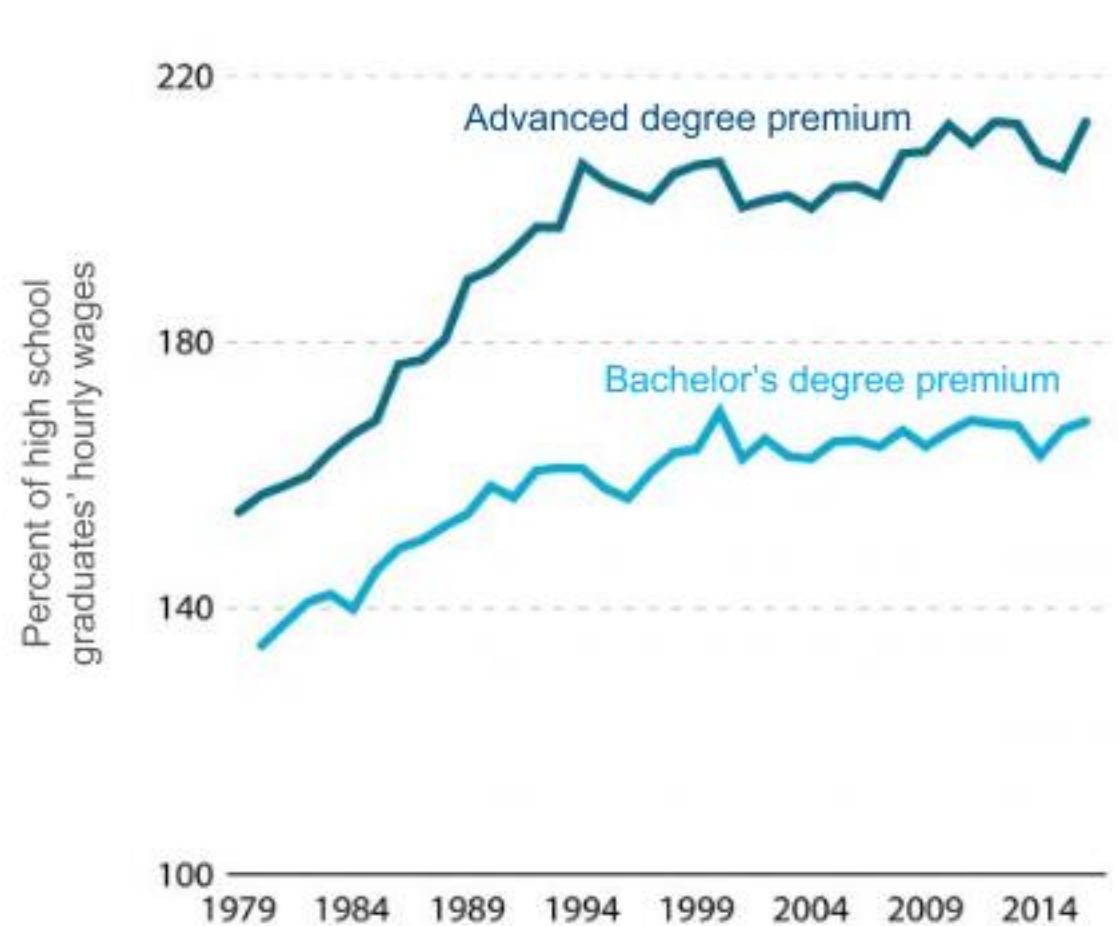


EDUCATION & WAGES

SHARE OF WORKERS 18 AND OVER BY EDUCATIONAL ATTAINMENT, 1975-2017

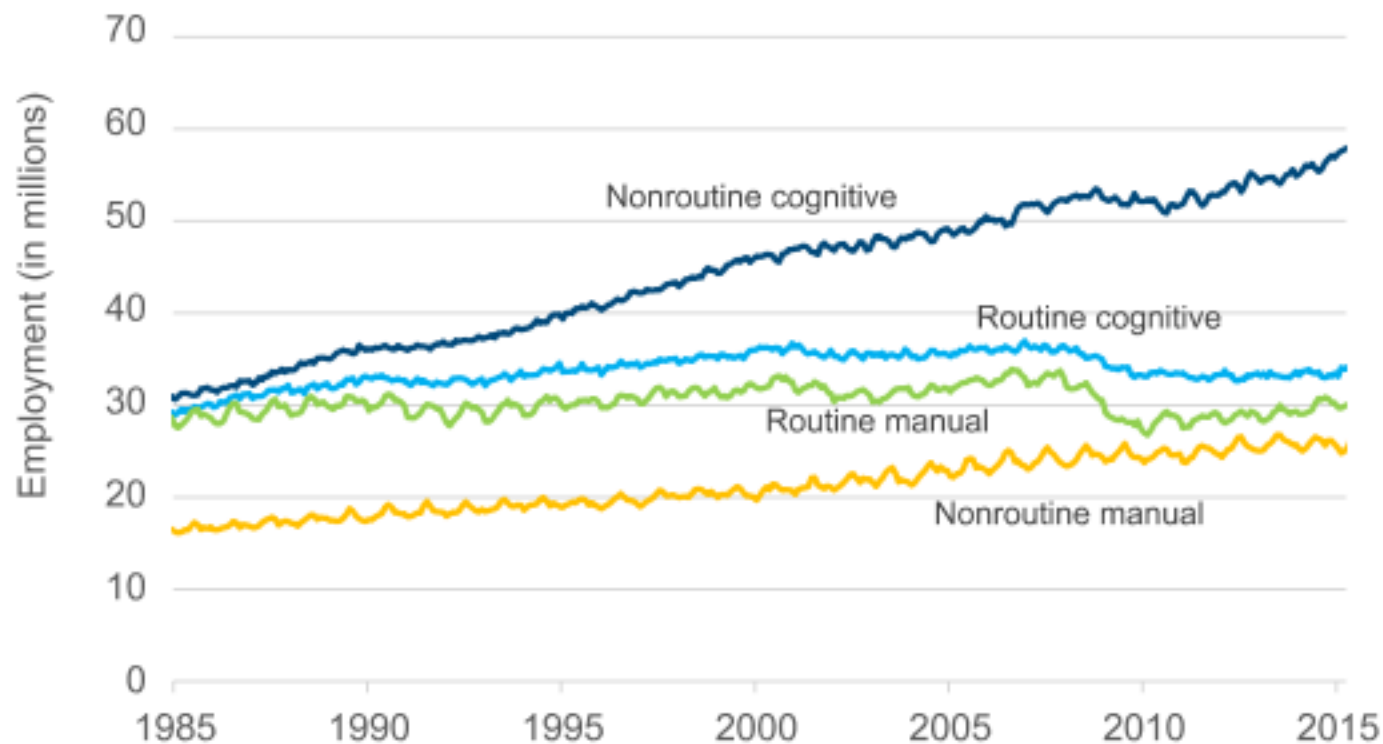


BACHELOR'S DEGREE AND ADVANCED DEGREE WAGE PREMIUMS, 1979-2016



IMPACT OF TECHNOLOGY ON JOBS

EMPLOYMENT LEVELS OF ROUTINE AND NONROUTINE OCCUPATIONS, 1983-2017



Nonroutine cognitive: Management, professional, and related occupations

Routine cognitive: Sales and office occupations

Routine manual: Production, transportation, and material moving occupations + Installation, maintenance, and repair occupations + Construction and extraction occupations

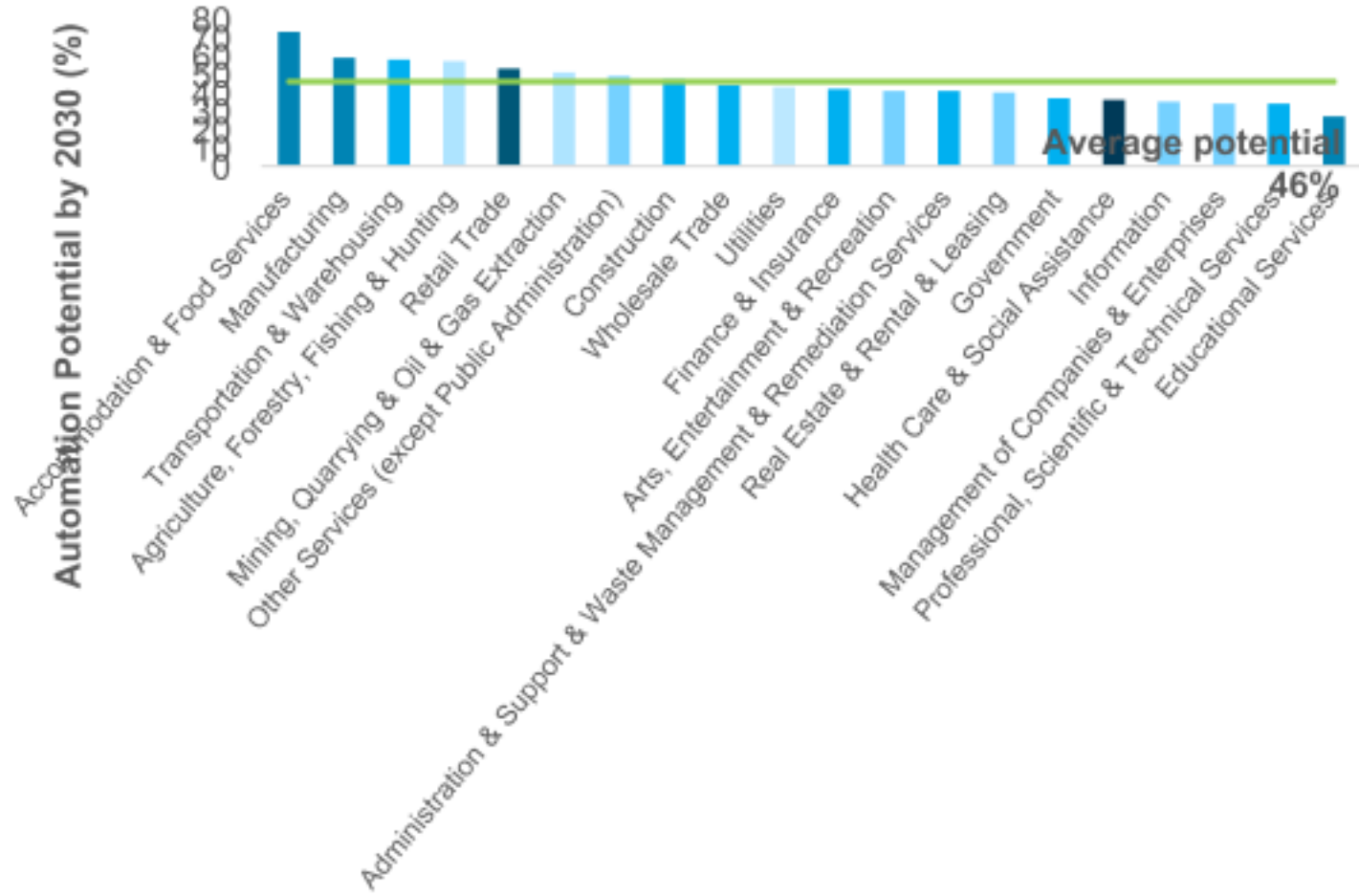
Nonroutine manual: Service occupations related to assisting or caring for others

POTENTIAL IMPACT OF AUTOMATION

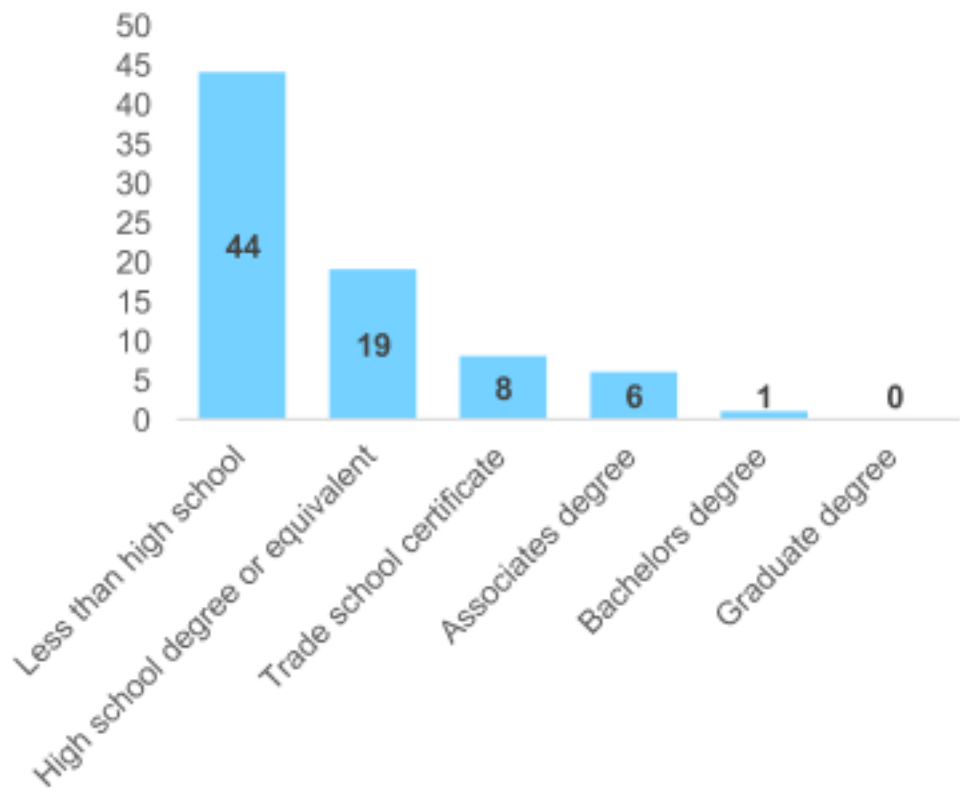
PREDICTOR	U.S. JOBS AT RISK OF AUTOMATION	TIMELINE
Oxford (2013)	47%	--
McKinsey Global Institute (2017)	Up to 33%	2030
PWC (2018)	Up to 38%	By the 2030s
OECD (2019)	10.2% at high risk Up to 27% at risk	--

AUTOMATION POTENTIAL BY INDUSTRY AND EDUCATION LEVEL

AUTOMATION POTENTIAL BY INDUSTRY GROUP



PERCENT OF WORKERS IN HIGHLY AUTOMATABLE JOBS BY EDUCATION LEVEL



HOW IS WORK CHANGING? NUMBER OF NON-TRADITIONAL WORKERS

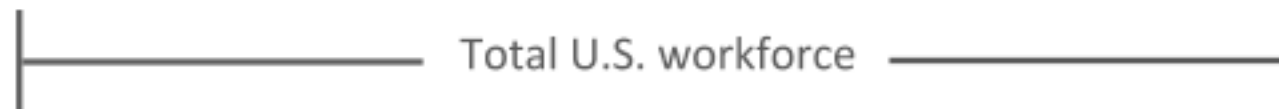
ENGAGED IN ANY CAPACITY
Primary and supplementary work



AS MAIN JOB
Independent work is primary



ONLINE PLATFORMS
Uber, Lyft, TaskRabbit, and others



NON-TRADITIONAL WORK LANDSCAPE

NON-TRADITIONAL WORK

Employment classification	Employee					Independent contractor
IRS designation	W-2					1099
Does worksite entity pay worker?	Yes, worker paid directly		No, worker employed and paid by intermediary			Varies
Bureau of Labor Statistics designation	Full-time	Part-time	On-call	Temporary help agency	Contract firm	Independent contractor
Representative occupations	<ul style="list-style-type: none"> Office clerk Machine operator Physician assistant Flight attendant 	<ul style="list-style-type: none"> Retail cashier Bartender Adjunct professor Fitness instructor 	<ul style="list-style-type: none"> Substitute teacher Farm laborer Construction worker 	<ul style="list-style-type: none"> Receptionist Warehouse associate HR specialist 	<ul style="list-style-type: none"> Security guard Janitor Software developer 	<ul style="list-style-type: none"> Real estate agent Massage therapist Rideshare driver Musician Hair stylist
Access to benefits	A range of benefits mandated by law; others voluntarily provided		Some benefits mandated by law; few benefits typically voluntarily provided by employers			Few benefits mandated by law or voluntarily provided

Note: reflects formal work arrangements

NEW SOCIAL CONTRACT FOR 21ST CENTURY

DIGNIFIED RETIREMENT

- Social Security
- Medicare
- Employer pension



STABLE CAREER

- Employer benefits (health care, retirement)
- Government protections (minimum wage, collective bargaining, overtime, anti-discrimination)



AFFORDABLE EDUCATION

- Universal high school movement
- Higher Education Act
- GI Bill



RETIREMENT?

- Social Security Trust Fund exhausts by 2035
- 401(K)



CAREER

- Multiple jobs over career
- Rise of on-demand economy and non-traditional work
- Increased financial insecurity



EDUCATION

- Student debt
- Value of 4-year vs. 2-year
- Alternative pathways



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