

Economic and Fiscal Impacts of Higher Education

Feb. 1, 2024



**UTAH DATA
RESEARCH
CENTER**



**UTAH
SYSTEM OF
HIGHER
EDUCATION**

Student Employment Impacts

Mean & Median Wage Growth One Year Before & One Year After Completion

2016 Graduates

Award	Mean				Median			
	2015	2017	\$ Diff.	% Diff.	2015	2017	\$ Diff.	% Diff.
1-Year Certificate	\$16,044	\$21,815	\$5,770	36%	\$8,591	\$16,874	\$8,283	96%
2-Year Certificate	\$15,365	\$25,359	\$9,994	65%	\$10,856	\$22,992	\$12,136	112%
Associate	\$16,553	\$25,114	\$8,560	52%	\$11,361	\$21,199	\$9,838	87%
Bachelor's	\$16,596	\$32,889	\$16,293	98%	\$11,191	\$31,346	\$20,155	180%

Mean & Median Difference in Wages Between Completers & Comparison Group

2016 Graduates

Award	Mean				Median			
	Graduates	Comparison	\$ Diff	% Diff	Graduates	Comparison	\$ Diff.	% Diff.
2-year Certificate	\$25,359	\$24,074	\$1,285	5%	\$22,992	\$16,808	\$6,184	37%
Associate	\$25,114	\$24,074	\$1,040	4%	\$21,199	\$16,808	\$4,391	26%
Bachelor's	\$32,889	\$24,074	\$8,816	37%	\$31,346	\$16,808	\$14,538	86%

Fiscal Impacts of Graduate Wages

	2-Year Certificate		Associate		Bachelor's	
Year	Mean \$ Diff.	Additional Revenue	Mean \$ Diff.	Additional Revenue	Mean \$ Diff.	Additional Revenue
2017	\$1,285	\$106,166	\$1,040	\$217,163	\$8,816	\$4,241,181
2018	\$1,860	\$149,677	\$771	\$156,022	\$12,135	\$5,291,910
2019	\$1,595	\$126,662	\$1,245	\$250,709	\$13,608	\$5,750,665
2020	\$1,034	\$79,266	\$2,298	\$446,496	\$17,068	\$6,895,595
2021	\$2,424	\$180,083	\$4,002	\$770,657	\$20,231	\$8,085,754
		\$641,854		\$1,841,046		\$30,265,105
Total Additional Revenue						\$32,748,006

THANK YOU!



**UTAH SYSTEM OF
HIGHER EDUCATION**

How Much Does Higher Education Contribute to Utah's Economy?

February 1, 2024

Utah Legislature – Higher Education Appropriations Subcommittee

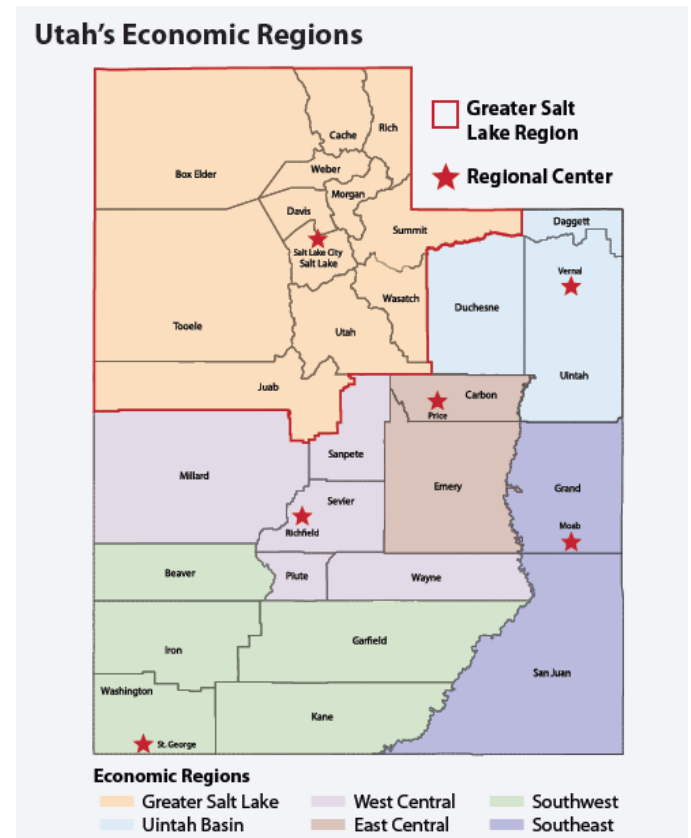


Presentation Outline

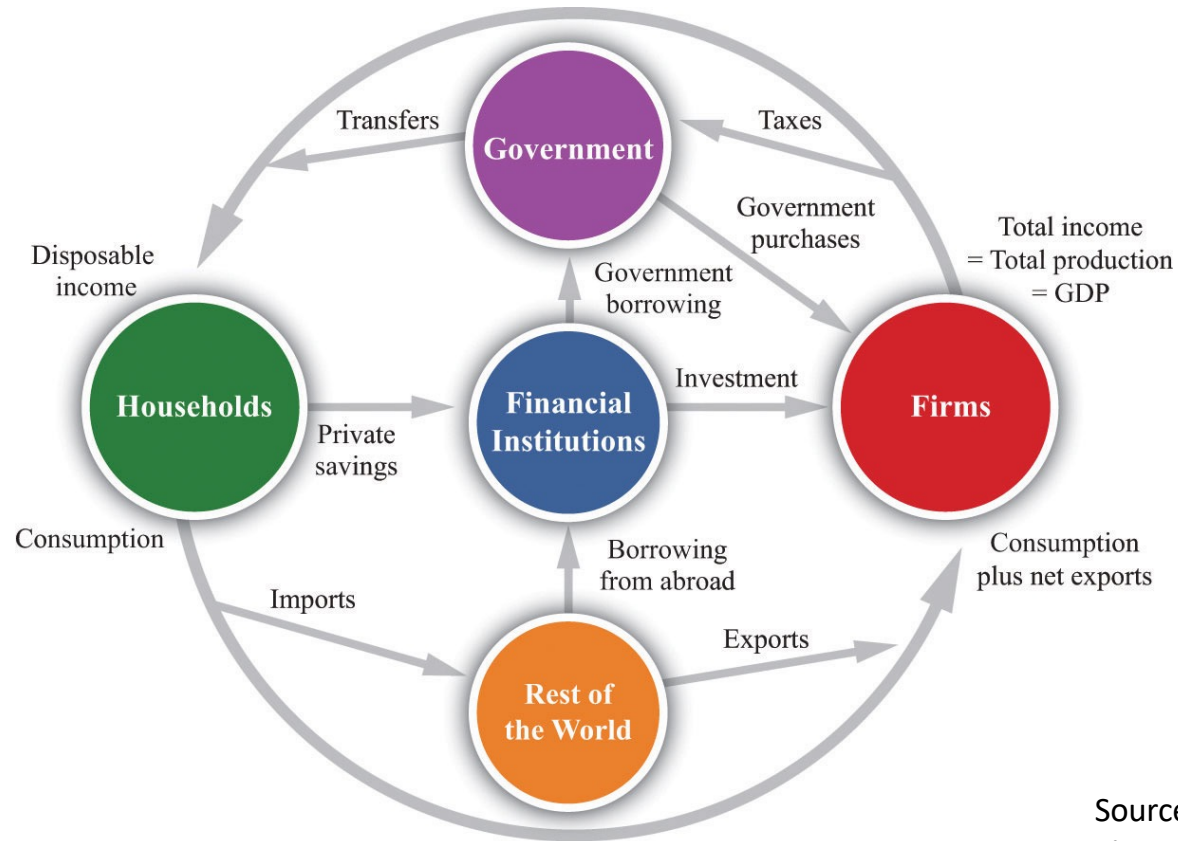
- **Economic fundamentals**
- **Economic modeling approach**
- **Higher education economic contribution to Utah's economy**

What Drives the Location of Economic Activity?

- **Economies respond heavily to availability and strength of basic economic resources** (“factors of production”)
 - Land / raw materials
 - Labor
 - Tools of production (“capital”)
 - Entrepreneurship
- **Location matters**
 - Local availability of factors of production drives economic decision-making
- **But....economies do not necessarily care about small political boundaries**

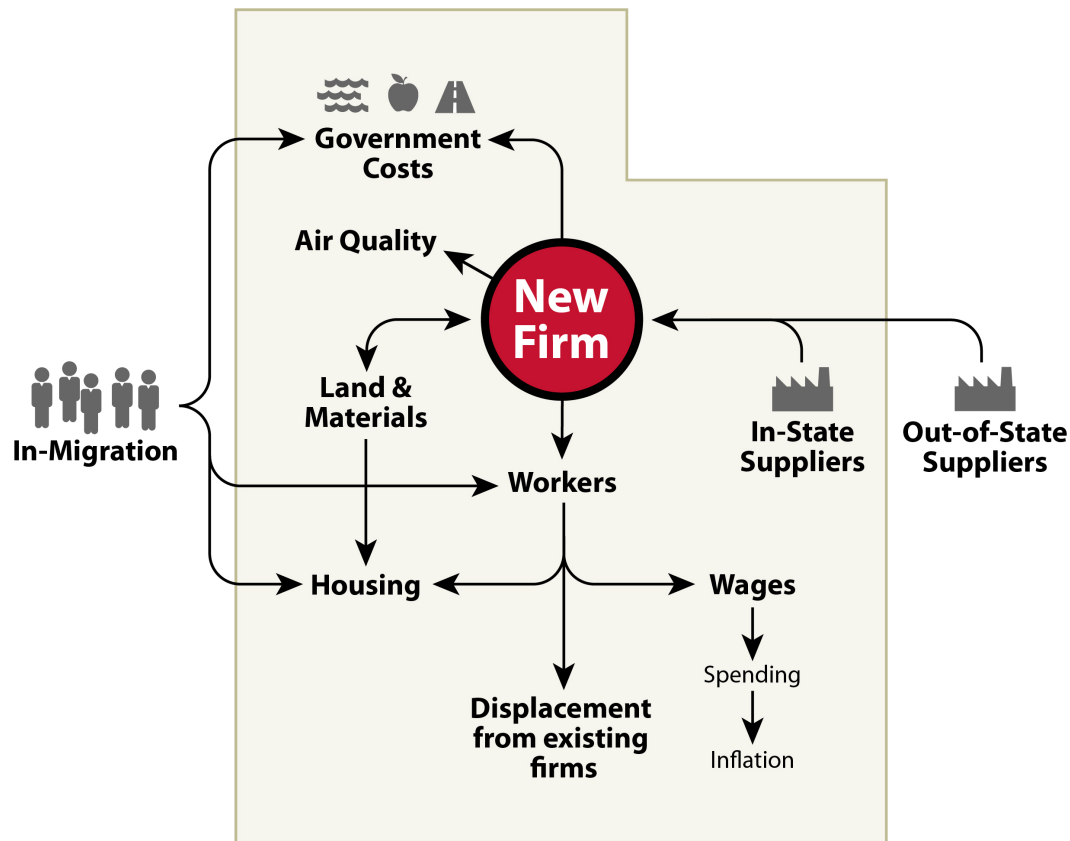


Circular Flow Model



Source: Saylor Academy - Economics: Theory Through Applications

Utah's Economy Functions Like an Ecosystem



- **Countless interconnections**

- Linkages
- Leakages

- Important to **consider overall impacts on the economic ecosystem** with all linkages and leakages incorporated

Seen and Unseen Effects on Economic Ecosystem

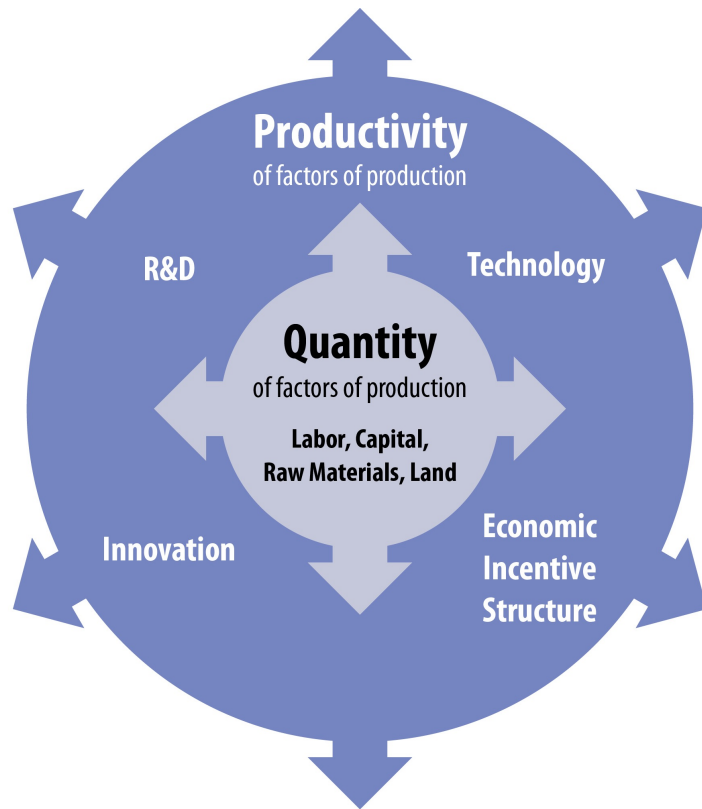


The art of economics consists in looking not merely at the immediate but at the longer effects of any act or policy; it consists in tracing the consequences of that policy not merely for one group but for all groups.

— Henry Hazlitt —

AZ QUOTES

How Does Utah's Economic Pie Grow?



Factors of Production

- **Land / natural resources** (Land, raw materials, water, timber, etc.)
- **Labor** – Human capital
- **Tools of production** – “Capital” (basic tools / equipment / buildings / public infrastructure)
- **Entrepreneurship** – Combines factors of production in new ways

Factor Accumulation

- More worker hours
- More equipment
- More infrastructure

Factor Productivity Growth

- Improved human capital
- Improved technology
- Improved equipment
- Improved infrastructure

What is an Economic Multiplier?



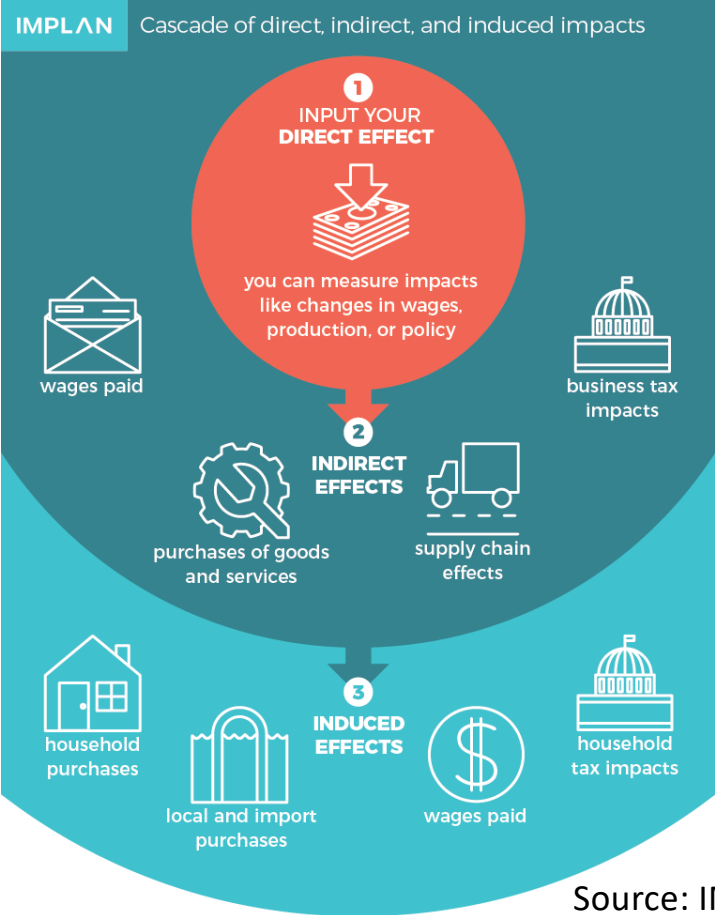
1
Direct Effects



2
Indirect Effects

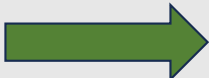

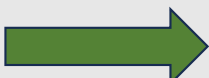


3
Induced Effects



Source: IMPLAN

USHE Institution Estimated Economic Contributions to Utah's Economy

<u>Economic Indicator</u>	<u>Direct Contribution</u>		<u>Total Contribution</u>
Jobs	~ 70,000		~130,000
Labor Income	~\$5.3 billion		~\$8.3 billion
Total Output	~\$10.5 billion		~\$22.1 billion

Note: Conservative estimates based on operating expenses

Source: Kem C. Gardner Policy Institute using IMPLAN

USHE Institution Estimated Economic Contributions to Utah's Economy

<u>Institution Type</u>	<u>Direct Value Added (GDP)</u>		<u>Total Value Added (GDP)</u>
Research	~\$4.3 billion	➔	~\$9.3 billion
Regional	~\$0.7 billion	➔	~\$1.4 billion
Community College	~\$0.2 billion	➔	~\$0.4 billion
Technical College	~\$0.1 billion	➔	~\$0.2 billion

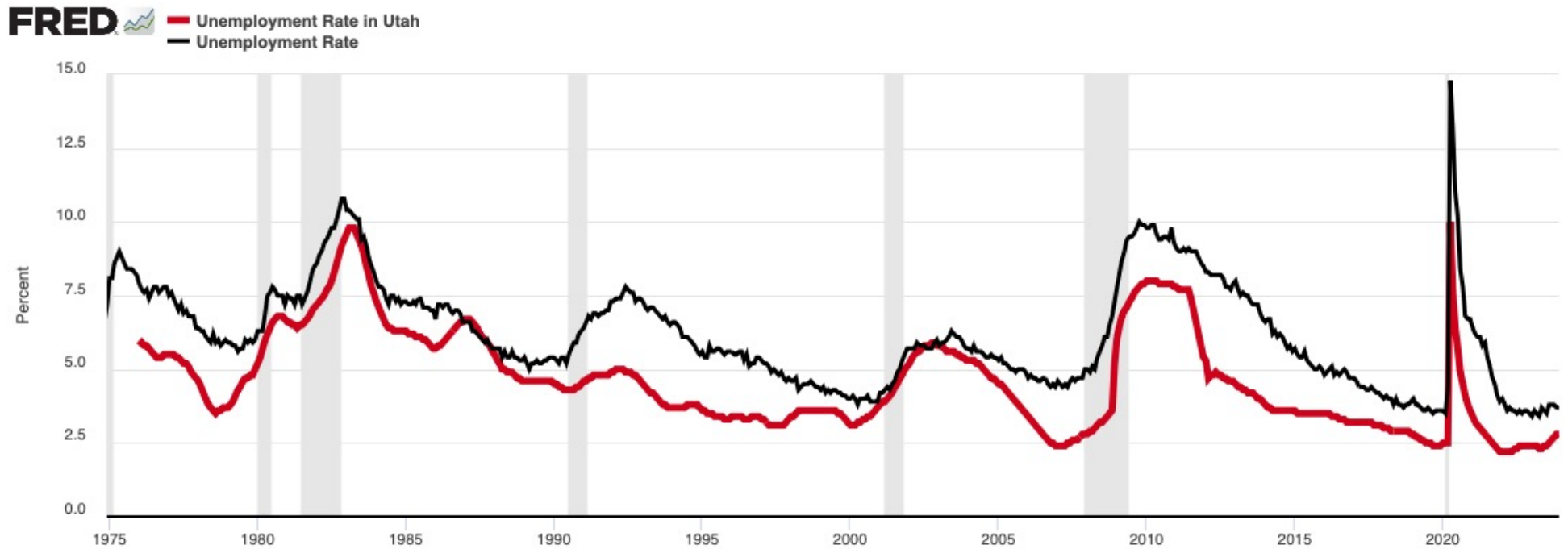
Source: Kem C. Gardner Policy Institute using IMPLAN

Education Multipliers Compared to Other Selected Industries in Utah

Industry	Multiplier
Construction	2.3
Hospitals	2.2
Professional and technical services	2.1
Educational services	2.1
Motor vehicle manufacturing	2.0
Air transportation	2.0
Motion picture and sound recording	1.8
Oil and gas extraction	1.8
Real estate	1.6

Source: RIMS II

Utah Unemployment Near All-Time Lows - Where Are Firms Finding New Skilled Labor?



Shaded areas indicate U.S. recessions.

Source: U.S. Bureau of Labor Statistics

fred.stlouisfed.org

Consider Different Types of Economic Benefits of Higher Education

- **Near-term economic impacts**
- **Long-term economic impacts**
- **Broader societal impacts**